13" SWING AWAY 72' AND 82' PORTABLE AUGERS INTERNAL GEAR DRIVE MODEL

OWNER'S & OPERATOR'S MANUAL

Effective September 24, 2024

Publication No. 1021226

THIS MANUAL IS FOR AUGERS WITH SERIAL NUMBERS OF 903406 OR HIGHER.

AGI HUTCHINSON MAYRATH

Hutchinson I Mayrath • 514 W. Crawford • Clay Center, KS. USA 67432

P 785.632.2161 • **F** 785.632.5964 • **TF** 800.523.6993

hutchinson-mayrath.com

aggrowth.com | AGI

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn SAFE day to day work practices. We want you as our partner in safety.

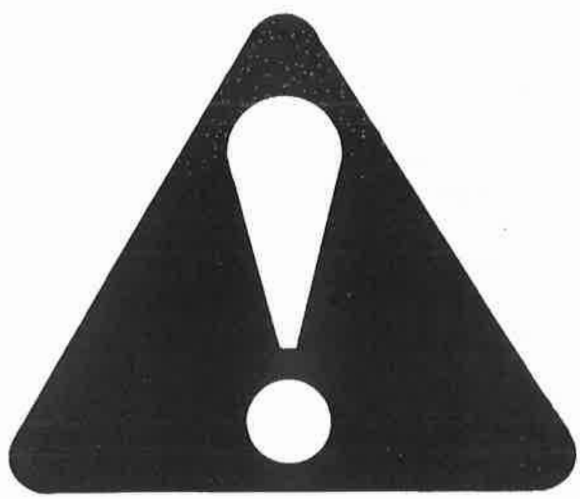
It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure that ALL safety shields and protection devices are installed and properly maintained. If any shields or guards are damaged or missing, contact your dealer to obtain the correct items.

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY ALERT SYMBOL

The symbol shown below is used to call your attention to instructions concerning your personal safety. Watch this symbol - it points out important safety precautions. It means "ATTENTION! Become alert! Your personal safety is involved!" Read the message that follows and be alert to the possibility of personal injury or death.



BE ALERT! YOUR SAFETY IS INVOLVED.

WARNING

Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

TABLE OF CONTENTS

SERIAL NUMBER

To ensure efficient and prompt service, please furnish us with the model and serial number of your auger in all correspondence or other contact. The serial plate is located on the right side of the lower undercarriage mount.

RIGHT AND LEFT DESIGNATION

When determining which is the left or right hand side of the unit, it is as if a person were standing at the intake end and looking toward the discharge end.

OPERATOR QUALIFICATIONS

Operation of this portable auger shall be limited to competent and experienced persons. In addition, anyone who will operate or work around a portable auger must use good common sense. In order to be qualified, they must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes portable augers. It is your responsibility to know what these regulations are in your own area or situation.
2. Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved."*
3. Unqualified persons are to stay out of the work area as shown in the work area diagrams. See Page 10.
4. A person who has not read and understood all operating and safety instruction is not qualified to operate the machine.

***Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a)(6).**

SIGN OFF SHEET

As a requirement of OSHA it is necessary for the employer to train the employee in the safe operation and safety procedures of this auger. We include this sign off sheet for your convenience and personal record keeping.

DATE	EMPLOYER SIGNATURE	EMPLOYEE SIGNATURE

MACHINE INSPECTION

After delivery of your new auger and/or completion of assembly and before each use, inspection of the machine is mandatory. Use the assembly instructions in this manual as a reference to determine that the auger is assembled properly. Inspection should include, but not be limited to:

1. Check to see that all guards listed in the assembly instructions are in place, secured and functional. The shields on the PTO driveline must rotate easily.
2. Check all safety signs and replace any that are worn, missing or illegible. The safety signs are listed in the back of this manual. Safety signs may be obtained from your dealer or ordered from the factory.
3. Check lift winch, hopper winch and cable for security and operation. There should be at least three complete wraps of cable around winch drum in full down position.
4. Are all fasteners tight?
5. Check all the hydraulic hoses, fittings and tubing to see if they are tight and not leaking hydraulic oil.
6. Check oil levels in gearboxes. See page 18 in the maintenance section for oil level information.
7. Be sure the clean out door is shut (in bottom of the inlet hopper).

TRACTOR REQUIREMENTS

This Swing Away Auger was designed to use a tractor with the following:

1. 540 RPM Power Take Off
2. Adjustable Drawbar
3. One hydraulic control circuit for lifting the main auger. (See chart for minimum pressure.)

	13" x 72'	13" x 82'
Tractor Hydraulic for Auger Lift	1500 PSI	1500 PSI
Approximate PTO Horsepower	100	110

TRACTOR DRAWBAR SETTINGS

Adjust the drawbar so there is 14" from the end of the tractor PTO output shaft and the center of the hitch pin. See Fig. 1.

IMPORTANT: If the distance from the end of the tractor PTO and hitch pin is shorter than the recommended distance, the auger should **NOT** be raised. Damage to the PTO driveline, auger hopper assembly, or tractor PTO may result when the input driveline bottoms out as it compresses.

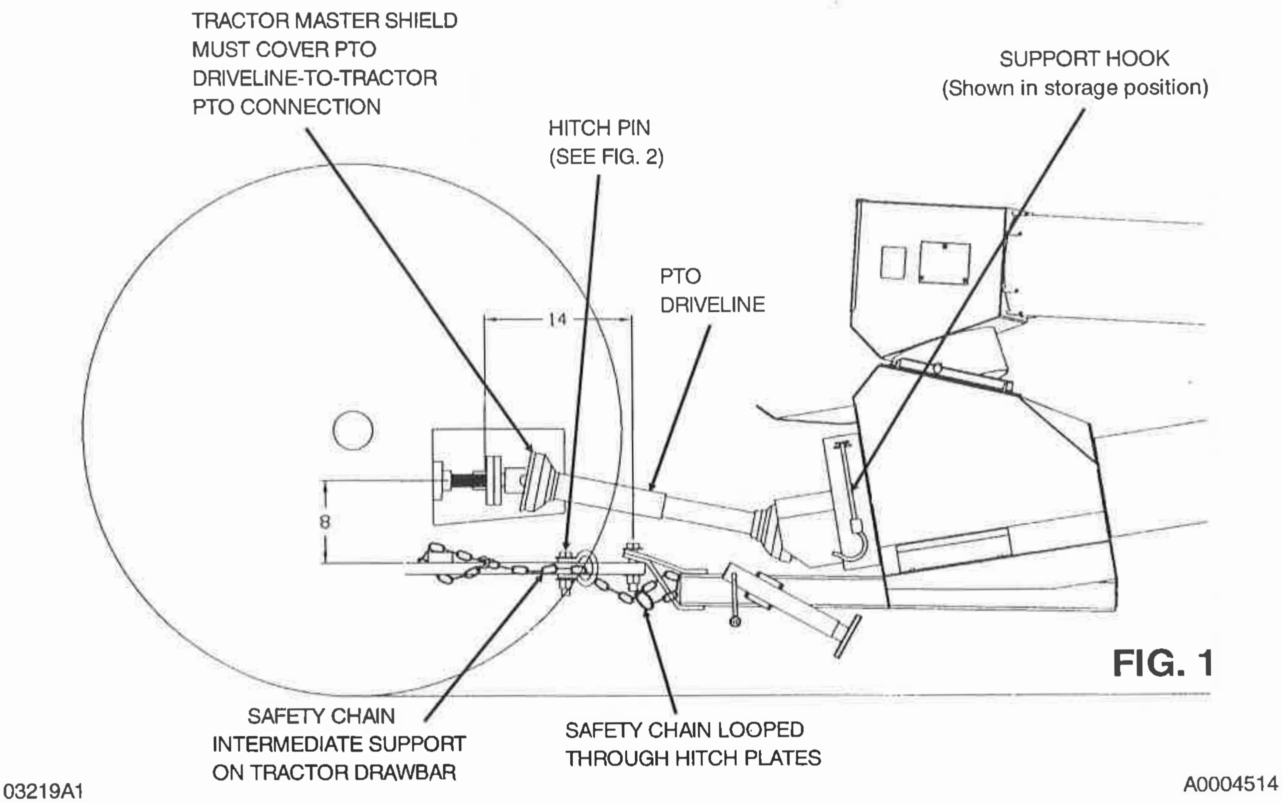


FIG. 1

ROAD TRANSPORT - HITCHING TO TRACTOR

NOTE: Empty machine before moving to prevent upending.

Never stand between tractor and portable auger when hitching unless all controls are in neutral and the brakes locked.

Never raise the intake end higher than is necessary to attach to a towing vehicle. Weight transfers rapidly to the head end when the intake is raised, particularly when the auger is in the raised position.

Follow these steps when hitching the auger to the tractor:

1. Lift the auger intake with the jack to the tractor drawbar height.
2. Secure hitch to tractor drawbar with a 7/8" dia. bolt with two nuts. See Fig. 2.
3. Fasten hitch safety chain. (See instructions below.)
4. Connect hydraulic hose to tractor. (See page 6 for Hydraulic Information.)
5. Retract hitch jack and rotate into transport position. (See Fig. 3 on page 6.)
6. DO NOT attach the PTO driveline to the tractor at this time. The driveline furnished with the auger is equipped with a "Spring-Lock" coupler at the tractor end. This type coupler is spring loaded and will fit the standard 1 3/8" x 6 spline PTO output shaft from a tractor. It will be attached to the tractor during placement of the auger. (See page 8.)
7. Place the swing-out hopper in transport position. (See "Stowing the Hopper", page 15.)

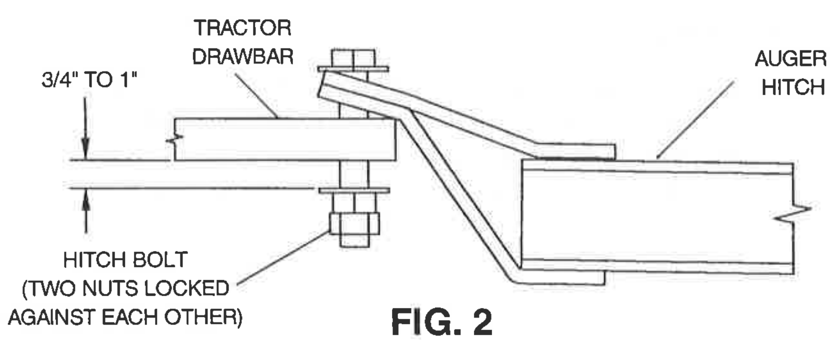


FIG. 2

HITCH SAFETY CHAIN INSTALLATION

An auxiliary attachment system (safety chain) is required on public roads to retain the connection between towing and towed machines in the event of separation of the primary attachment system. The safety chain shall have a minimum system strength sufficient to support the gross weight of the auger. (See page 7 for auger weights.)

1. The safety chain should be routed through the hitch plates welded to the end of the hitch tube. (See Fig. 1.)
2. A clevis or intermediate chain support should be fastened to the tractor drawbar no further than 6" from the hitch pin.
3. Allow no more slack in chain then necessary for articulation.
4. Store safety chain when un-hitched from tractor. The chain may be wrapped around auger hitch when not in use.
5. Replace safety chain if one or more links or end fittings are broken, stretched or otherwise damaged or deformed.

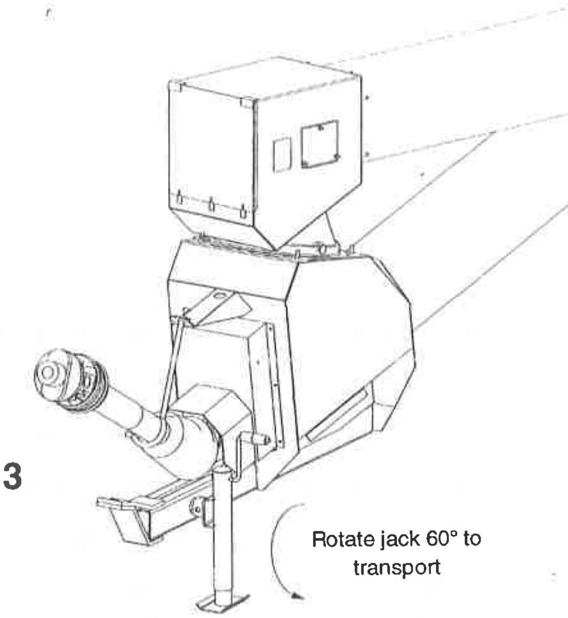
ROAD TRANSPORT - HITCHING TO TRACTOR

JACK

When using the jack to support the inlet end of the auger, connect to the jack mount and secure with the attached pin. When the auger is hitched to a tractor, rotate the jack 60° into transport position.

CAUTION: Before retracting or folding the jack, the hitch should be secured to the tractor drawbar to prevent the hitch from falling to the ground.

FIG. 3



HYDRAULIC COMPONENTS

The hydraulic components received with your Swing-Away Auger were selected to deliver the most efficient and economical use. Any parts for replacement should be replaced with parts of the same type and size. Replace any hoses or fittings that develop leaks.

WARNING: Keep all hydraulic lines away from moving parts.

MAIN AUGER LIFT SYSTEM

Standard equipment for your Swing-Away Auger Lift System includes the hydraulic winch, fittings and hydraulic hoses from the winch to the tractor, with the exception of fittings required to attach the hoses to the tractor. The hydraulic winch includes a restrictor that limits the speed of operation. Two 1/2" female pipe thread tractor fittings are required to fit the end of the hydraulic hoses (not furnished).

CAUTION: Do not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pinhole leak, can penetrate body tissues and cause serious injury. Use a piece of wood or cardboard when looking for leaks. Never use the hands or other parts of the body. When reassembling, make absolutely certain that all connections are tight. If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction may occur if medical attention is not received at once.

FIG. 4

03221A1 01908A1 A0004516

TRANSPORTING AUGER

Moving your portable auger requires careful planning. A route plan should be considered beforehand to avoid dangerous obstacles and loss of time.

TRANSPORT: Move the auger with a tractor to or from the work area. A truck suitable to handle the hitch weight and gross weight of the auger may be used for transporting the auger over greater distances.

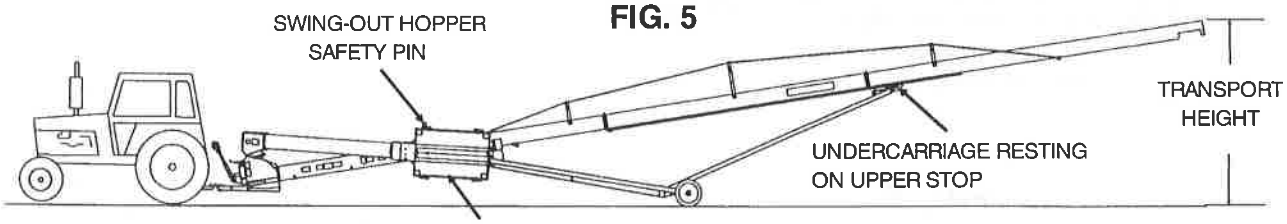
Follow these steps when transporting the auger:

1. Always transport your auger in the full-down position. The swing-out hopper must be raised and in the transport position.
2. Hitch should be secured to tractor and jack stored in transport position. Fasten alternate hitch safety chain.
3. The swing-out hopper support pin must be installed. (See Stowing the Hopper on page 15.)

TRANSPORTING HEIGHT

Know the transport height of your auger before moving the auger. Plan your route to avoid overhead obstructions and power lines.

FIG. 5



IMPORTANT: Transport heights are figured with auger attached to towing vehicle with a drawbar height of 1'-6".

SIZE	13" x 72'	13" x 82'
TRANSPORT HEIGHT	14'-1"	14'-9"
AUGER WEIGHT	4475 lbs.	4950 lbs.

IMPORTANT: AVOID SHARP TURNS. It is possible for the hopper to hit the tractor wheels or fenders.

DANGER: Be alert to overhead obstructions and electrical wires. Failure to do so may result in electrocution. Lower auger well below level of power lines before moving.

Maintain at least ten (10) feet of clearance. See above chart showing the height of each portable auger in the lowered transport position. Check the chart to determine the height of your auger.

Never allow persons to stand underneath or ride on the auger when it is being transported.

Do not transport the auger at speeds in excess of 20 MPH and comply with your state and local regulations governing marking, towing and maximum width. Observe safe driving and operation practices.

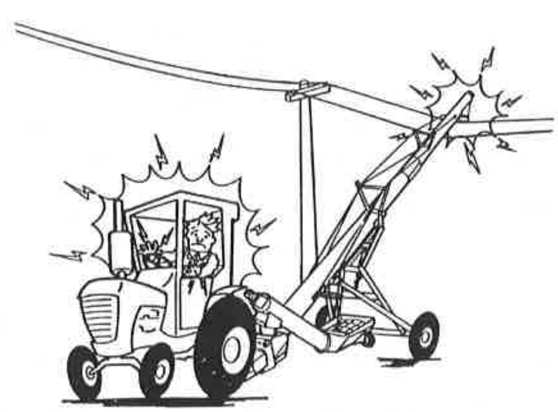
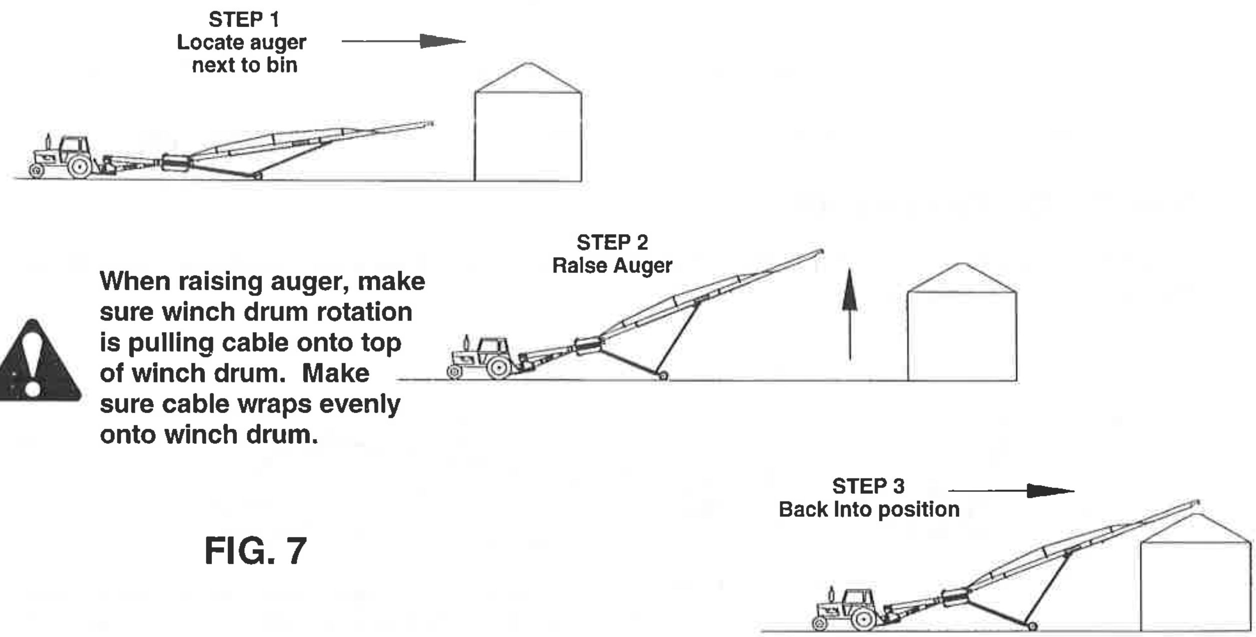


FIG. 6

PLACEMENT OF AUGER

DANGER: Make certain everyone is clear of the area when moving the auger. To prevent tip-over when backing, avoid rolling over any obstruction. Also avoid moving the auger at right angles to a slope. If the auger is to set on a slope, approach the bin uphill.

Make sure entire area above auger and in line of travel is clear of overhead obstructions and electrical wires. Failure to do so may result in electrocution. Maintain at least ten (10) feet of clearance. Electrocution can occur without direct contact.



When raising auger, make sure winch drum rotation is pulling cable onto top of winch drum. Make sure cable wraps evenly onto winch drum.

FIG. 7

Step 1 -

A. Using a towing vehicle, place the auger on a level surface, as close as possible to the bin or storage structure that is to be loaded. Be sure this area is clear of any obstructions. If not already hitched to tractor, do so at this time. (See pages 14 and 5.)
B. Swing-out hopper should be in transport position.
C. Attach the PTO driveline to the tractor. To make attachment, start sliding the driveline end onto the tractor PTO output shaft. Compress the spring keeper on the PTO driveline and continue to slide onto the tractor PTO output shaft until the keeper seats in the groove on the tractor PTO output shaft. Then the spring keeper will return to its original position and the PTO driveline will be locked onto the tractor PTO output shaft. Place PTO support hook into storage position. (See Fig. 1, Page 4.) **Do not engage the PTO when swing-out hopper is in transport position.**

Step 2 - The wheels must be allowed to roll freely when raising. Raise the auger only high enough to allow minimum clearance above the bin. **Correct rotation of winch drum is critical. (See note in Fig. 7.)**
NOTICE: Avoid sharp turns while moving the auger when the PTO driveline is attached to the tractor. Maneuvering with the PTO driveline attached will result in driveline damage not covered by warranty. Make sure the tractor is exactly in line with the auger during PTO operation.

Step 3 - Slowly back the auger over the storage structure. Lower the auger until the discharge spout is in or directly over the bin hole opening.* Place tractor in park, set brake and chock wheels.

It is a good practice to tie the discharge end of the auger to the bin or storage structure to prevent possible wind damage. Remember to untie the auger before attempting to move. Do not attempt to increase auger height by positioning wheels on lumber, blocks or by other means.

***NOTE: When discharging in a grain spreader, always maintain at least 12 inches space between the auger discharge and the spreader. The discharge end will lower as auger fills with grain during operation.**

DEPLOY SWING-OUT HOPPER

1. Raise swing-out hopper slightly by turning winch handle clockwise to remove pressure on lock-out pin. Remove lock-out pin in swing-out hopper lift arm.

2. Lower the swing-out hopper by grasping the handle firmly turning handle counter-clockwise.

CAUTION: Maintain control of the winch handle at all times. The load will drop if the handle is released. Always turn handle clockwise after letting out the cable to activate brake in winch.

3. When the hopper reaches the ground, unhook cable from the hopper. Hang the cable hook on part of the auger housing so it is out of the way.

4. Swing the hopper out to an operating position.

IMPORTANT: The SWING-OUT HOPPER should not be moved while the auger is in operation. Always have the hopper in operating position before engaging the P.T.O.

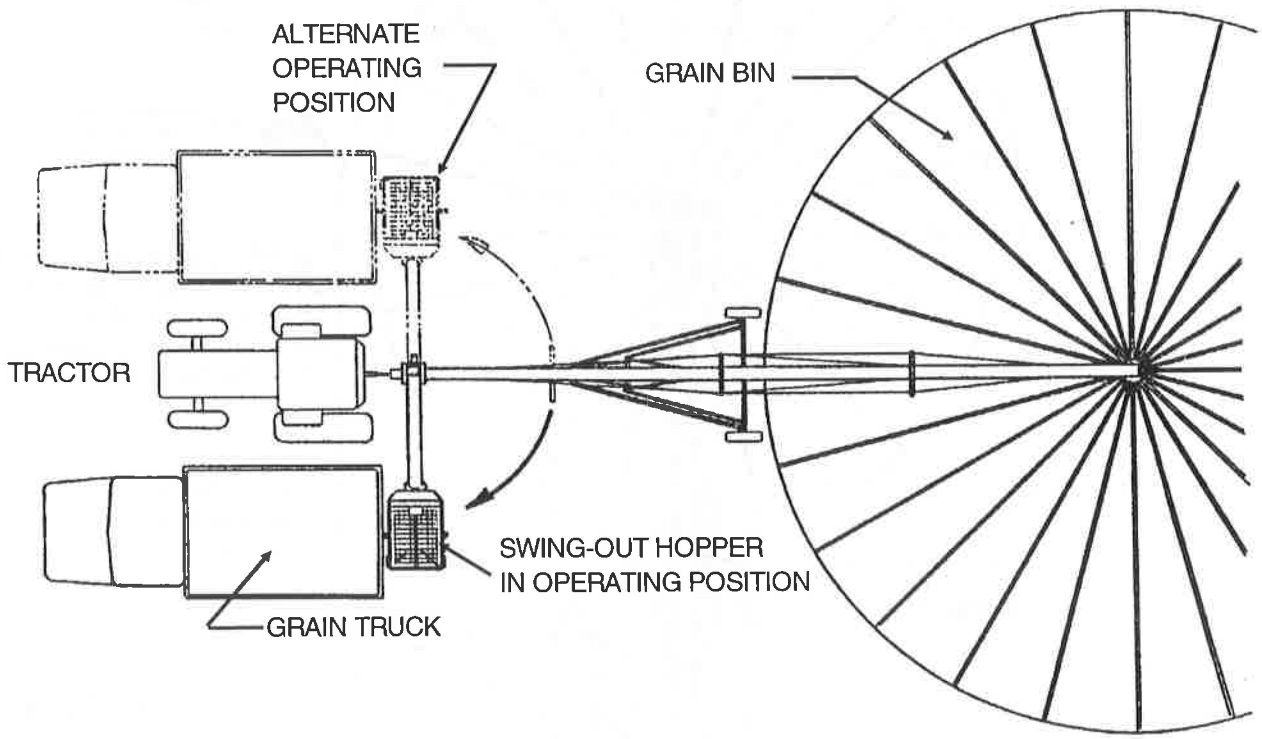


FIG. 8

UN-HITCHING INSTRUCTIONS

Follow these steps to unhitch the auger:

NOTE: When the tractor must be disconnected from the auger in the raised position, anchor the discharge end of the auger to the bin or structure to prevent possible wind damage.

A. Relieve tractor internal hydraulic pressure. Then disconnect the hydraulic hoses from the tractor.
B. The auger wheels should be chocked to prevent the auger from rolling.
C. Place jack into the lifting position and remove hitch weight from tractor drawbar. Be sure jack pin is properly set to prevent jack from rotating on mount.
D. Remove safety chain and hitch pin. Disconnect the tractor from the auger.
E. Open clean-out door in bottom of main inlet hopper to clean out excess grain and allow water to drain during storage.

Never raise the intake end higher than necessary to attach to a towing vehicle.
Weight is transferred rapidly to the head end when the intake is raised, particularly when the auger is in a raised position.
Never stand between tractor and auger when hitching unless all controls are in neutral and the brakes locked.

PTO DRIVELINE STORAGE

The PTO driveline should be placed in the storage position when not attached to the tractor. Tilt the PTO driveline up and swing support hook under the driveline to support its weight. See Fig. 12.

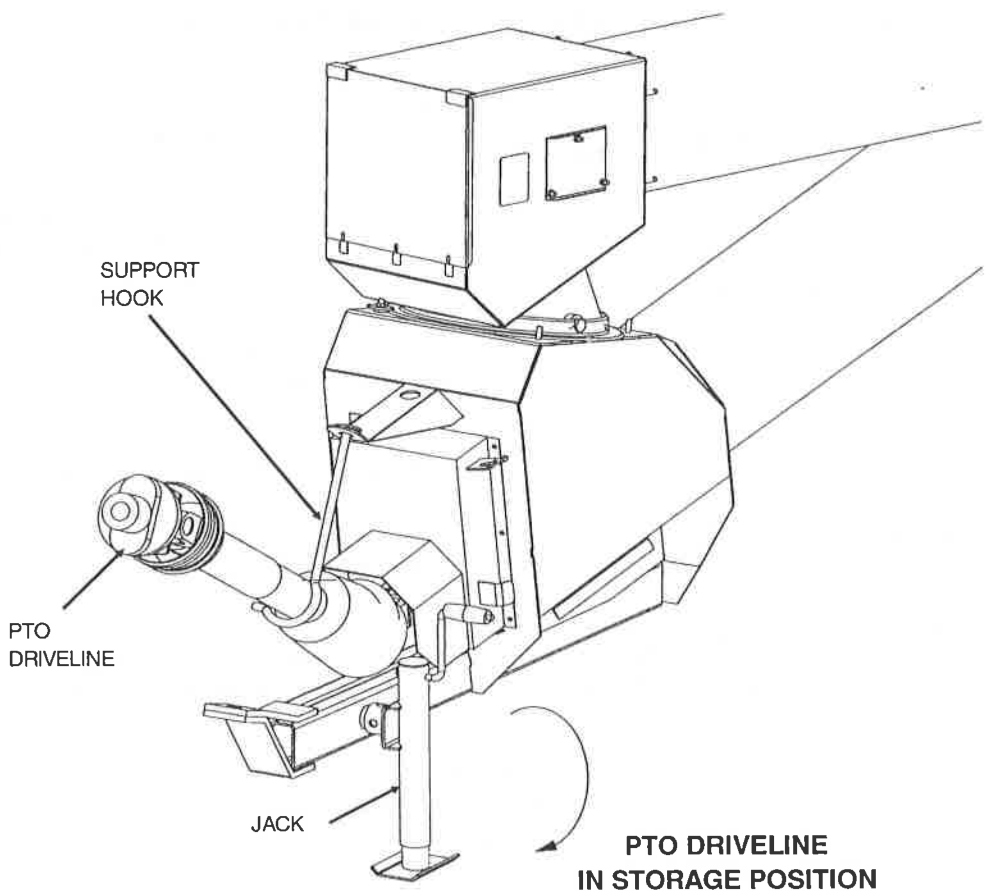


FIG. 12

UN-HITCHING INSTRUCTIONS - CONT.

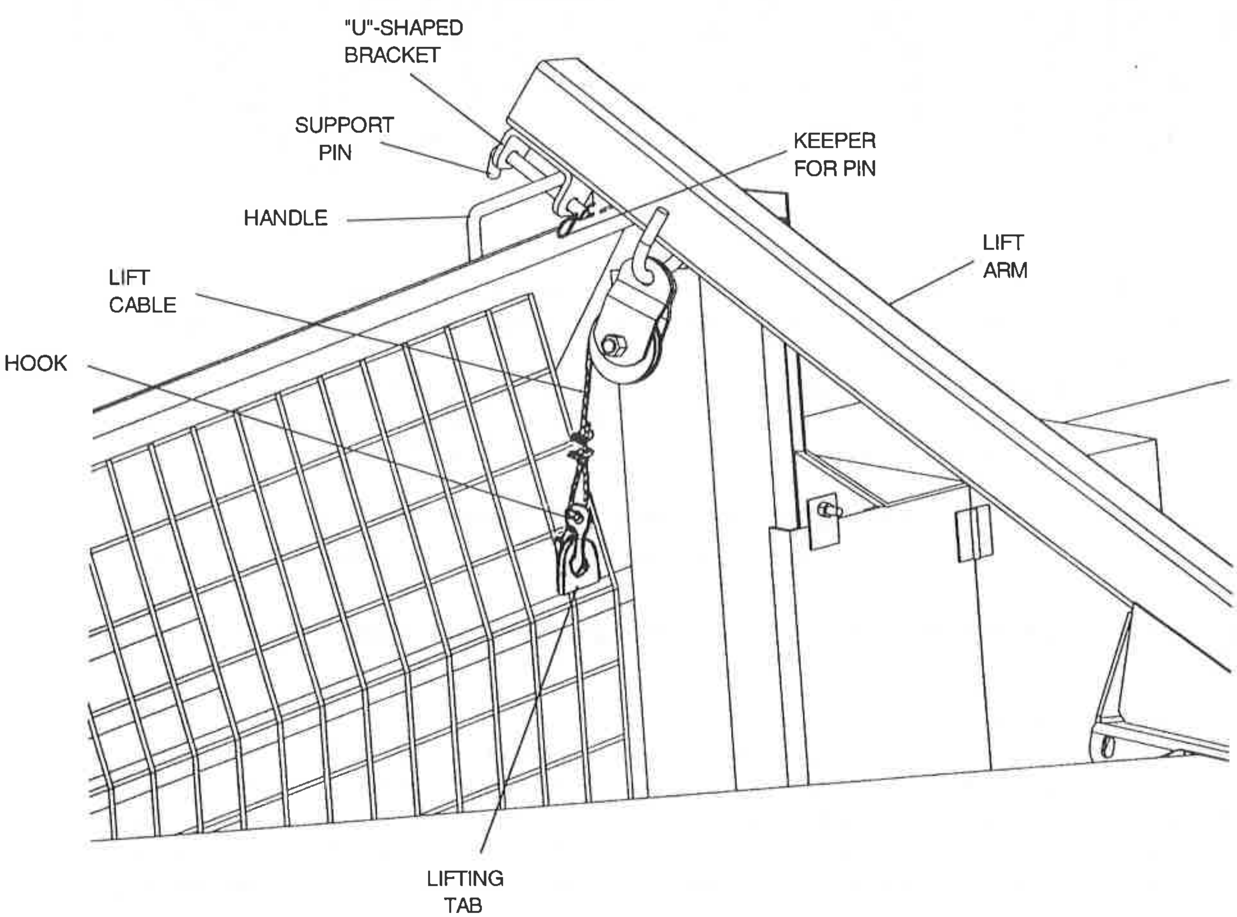
STOWING THE HOPPER

To raise the swing-out hopper, allow all grain to discharge from the auger, disengage the PTO and lockout power sources.

1. Swing the hopper along side of the main auger.
2. Turn handle counter-clockwise on winch and pull enough cable off winch to attach the cable hook to the lifting tab in the front of the hopper. There are two tabs in the front of the hopper, use tab that is furthest away from main auger. See Fig. 13 as the hopper is lifted, the hopper will rotate and be facing toward the main auger.
3. Turn the winch handle clockwise to raise the hopper.
4. Raise the hopper until the handle of the hopper is inside the "u" -shaped bracket. Secure hopper to lift arm by installing the support pin through the "u"-shaped bracket to capture the handle of the hopper. See Fig. 14.
5. Slightly lower hopper until the weight of the hopper is being supported by the pin.

NOTE: Observe the cable as it is winding onto the winch drum. The cable should roll up on the drum evenly; avoid cable build-up on one side of the drum.

CAUTION: Keep hands away from winch drum during operation.



03234A1 A0004525

LUBRICATION / MAINTENANCE

For economical and efficient operation of your auger, maintain regular and correct lubrication. Neglect leads to reduced efficiency, excessive wear and needless down time. Use the following schedule for best results.

Keep all safety shields and devices in place.
Never clean, adjust or lubricate a machine that is in operation.

PTO DRIVELINE U-JOINT

The PTO driveline has five fittings that require lubrication. See Fig. 15 below for location of fittings. The first lube interval should be 16-24 hours of operation after initial start-up then follow these recommendations.

CONSTANT ANGLE LUBE RECOMMENDATIONS

INTERVAL	LOCATION	AMOUNT
4 HRS.	U-CROSS & BEARINGS	1 PUMP
4 HRS.	TELESCOPING MEMBERS	4-8 PUMPS
4 HRS.	CV BALL& SOCKET	1-2 PUMPS

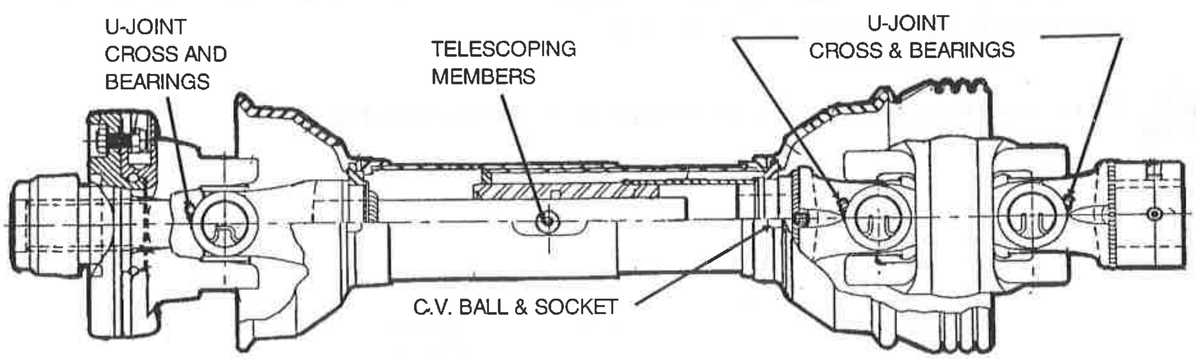


FIG. 15

Lubricate all fittings with a good quality lithium soap base E.P. grease meeting the N.L.G.I. # 2 specifications and containing no more than 1% molybdenum disulfide. (For example, Shell super duty or equivalent)
An E.P. grease meeting the N.L.G.I. # 2 specifications and containing 3% molybdenum disulfide may be substituted in the telescoping, and CV ball and socket members only. (Examples: Mobil Oil Company, "Mobil Grease CMP"' Shell Oil Company, "Retinax AM"; Texaco, "Molytex EP # 0 and # 2".)

REPLACEMENT PARTS ARE NOT LUBRICATED

Replacement parts must be lubricated at time of assembly. Follow recommendations listed above.

Before engaging PTO be sure PTO driveline shaft shields turn freely on shaft.

PTO DRIVELINE SHEAR BOLT

The PTO driveline is equipped with a shear bolt at the tractor connection. The shear bolt limits damage to the auger if it becomes plugged or subjected to high loads. It is important to use the correct replacement bolt (of the proper size and strength) to insure that the shear device will protect the auger and operator. For replacement shear bolt information, see pages P-11 or P-12. Extra shear bolts are provided with the auger and are stored in the operator's manual container located on the main auger inlet hopper.

LUBRICATION / MAINTENANCE

SWING-OUT HOPPER FLIGHT U-JOINTS

The u-joints connect the hopper drive shaft and the inclined flight at the hopper elbow. This should be lubricated at approximately (10) hour intervals with S.A.E. multipurpose type grease. To access the u-joint inside the connection box, rotate the retaining tabs and raise the hinged cover. To access u-joint in the hopper, go through the screen in the hopper. Be sure to close cover and replace the retaining tabs before operating unit.

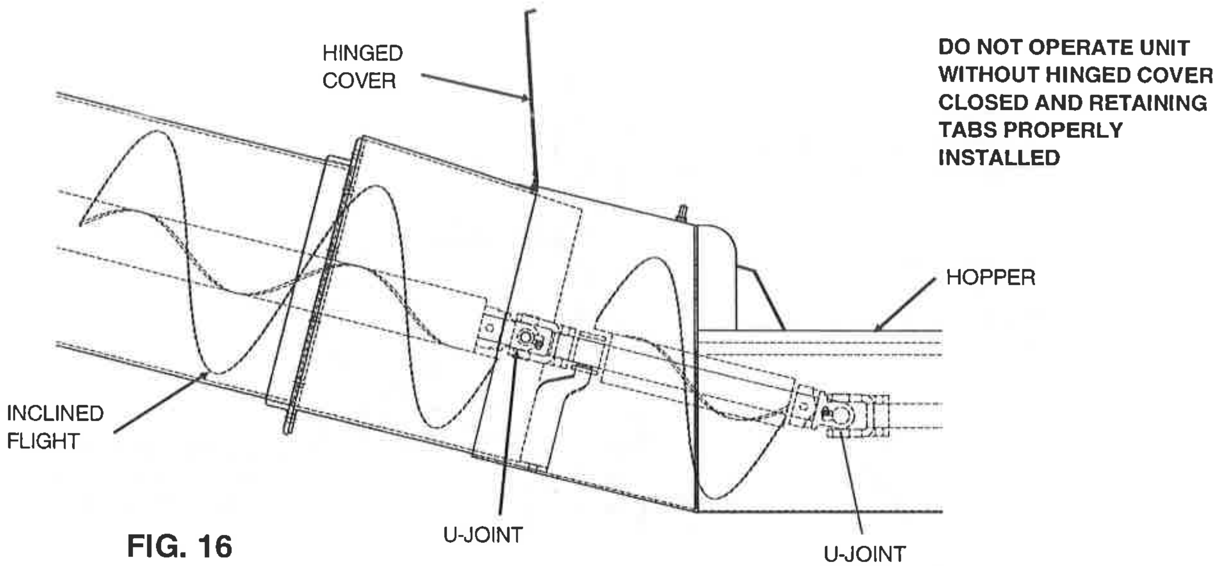


FIG. 16

INLET HOPPER U-JOINT

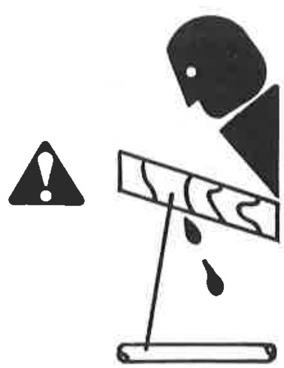
A u-joint connects the incline tube gearbox and inlet hopper gearbox. This should be lubricated at approximately (10) hour intervals with SAE multi-purpose type grease. Use the pop-open door to gain access to the u-joint grease zerk. See Fig. 17 on page 18.

INLET HOPPER DRIVE CHAIN

There is a roller chain that drives the swing-out hopper that should be lubricated at approximately (10) hour intervals. This chain is located inside the shield of the inlet hopper. A hole in the shield is provided for oiling. (See Fig. 17 on page 18.)

HYDRAULIC HOSE

Check all the hydraulic fittings and hoses to see if they are tight and not leaking hydraulic oil. Replace any hydraulic hose that may be cut or damaged.



CAUTION: Do not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak, can penetrate body tissues and cause serious injury. Use a piece of wood or cardboard when looking for leaks. Never use the hands or other parts of the body. When reassembling, make absolutely certain that all connections are tight. If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction may occur if medical attention is not received at once.

LUBRICATION / MAINTENANCE

GEARBOX

IMPORTANT: Under working conditions oil will dissipate. Check oil in gearboxes periodically and maintain proper level.

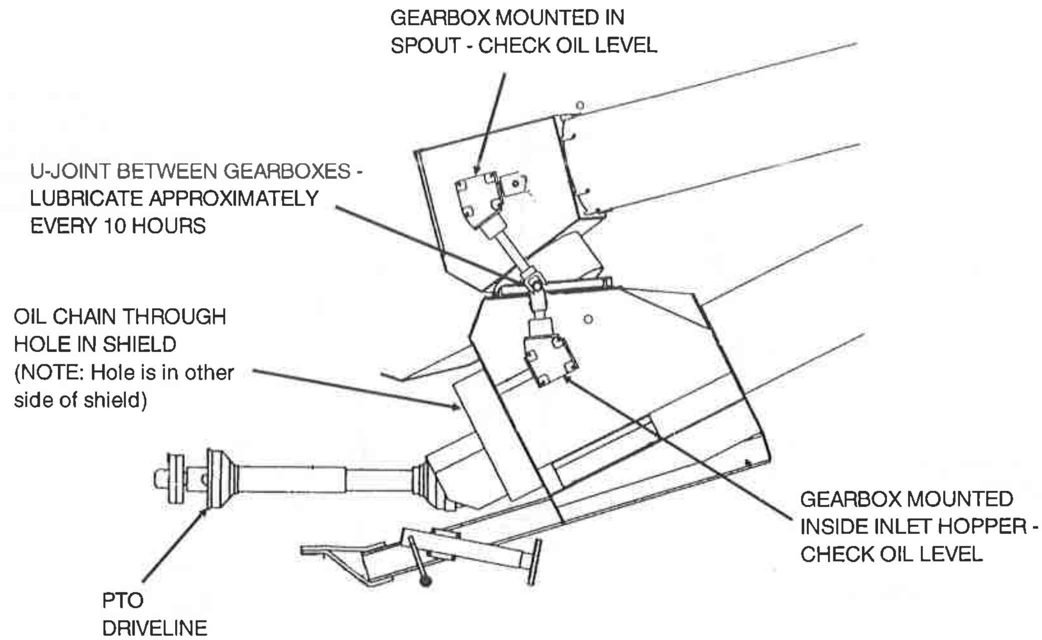


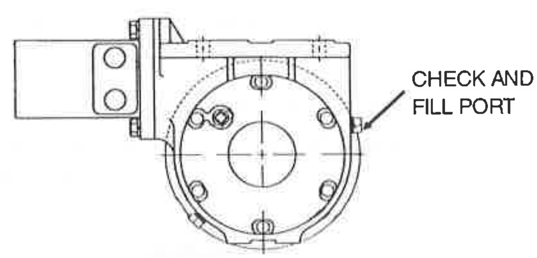
FIG. 17
(CUT AWAY VIEW)

The gearboxes are shipped with oil. To check oil levels in the gearboxes, use access doors in the side of the spout and inlet hopper. See Fig. 17. Use plugs in the side of the gearboxes to check oil level. Gearboxes should be filled to plug level.

DO NOT OPERATE UNIT WITH ACCESS DOORS OPEN.

WINCH

The winch is shipped with oil. Use check plug shown in Fig. 18 to determine oil level. Winch should be filled to this plug level.



WINCH OIL LEVEL

FIG. 18

For lubrication in normal operating temperatures (between 40°F to 120°F), we recommend the use of non-foaming, multi-purpose gear oil, SAE 90 weight. For temperatures below 40°F, use SAE 80 weight oil. Use a grade commercially available for automotive differentials. Extra pressure additives may be of value in severe applications.

DO NOT ADD MORE OIL THAN RECOMMENDED. ADDITIONAL OIL MAY DAMAGE THE SEALS OR BE FORCED OUT THROUGH THE VENTED PLUG.

LUBRICATION / MAINTENANCE

FRICTION TYPE WINCH

The Swing-Out Hopper is lifted into transport position by a friction type winch. (See page P-15.)
This type of winch requires the following maintenance:
A. All gears should have a film of grease on them at all times.
B. The nut holding the handle assembly on should be kept tight.
C. Wet with oil the two bushings located at the end of the drum shaft.
IMPORTANT: Do not get oil or grease on brake disc faces (located between ratchet gear brake hub and pinion shaft.)
D. Check brake disc, if worn to less than 1/16 of an inch thick, cracked or broken, replace both discs.

(See the owner's manual and parts list for the winch that is included with this manual for additional winch information.)

UNDERCARRIAGE AXLE SPINDLE BEARINGS

Tapered roller type bearings are standard and should be repacked with grease and adjusted annually or as needed, determined by usage.

Care must be used in dismantling wheel bearing assemblies. First remove the dust cap by prying around the edges. Remove the cotter pin, slotted nut and flat washer. Carefully remove the hub and bearings from the spindle. Inspect all parts for wear or damage and replace with new ones if necessary.

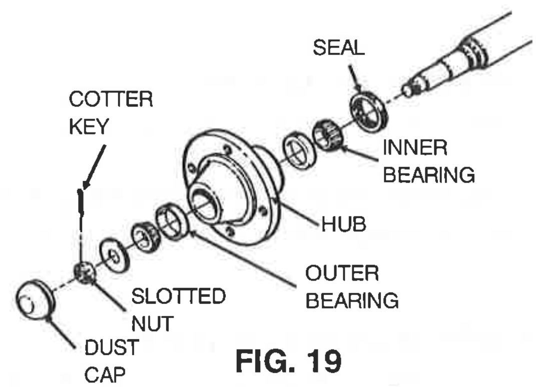


FIG. 19

When reassembling the hub, repack both bearing cones with grease and fill the hub cavity 1/3 full. Place inner bearing assemblies into the hub, and then press seal into hub and carefully reinstall the hub on the spindle. When placing hub on spindle be careful not to damage the lip of the grease seal. Install outer bearing assembly into the hub, and replace flat washer and slotted nut. Then tighten the slotted nut to seal the bearings until the hub binds as you rotate hub. Back off the slotted nut to the next slot and install a new 5/32" x 1 1/4" long collar pin. Replace dust cap.

BALL BEARING MAINTENANCE

The main auger head bearing is a self-aligning, sealed ball bearing, which has been packed at the factory and requires no further lubrication. There is no adjustment to be made to the bearing, but check that it is firmly fastened. Also check that the setscrews in the lock collar are tight against the shaft, securing the lock collar to the shaft.

Inlet hopper bearings are supported by self-aligning, sealed ball bearings, which have been packed at the factory, but operator should lubricate at approximately fifty (50) hour intervals. Lubricate lightly with SAE multi-purpose type grease.

BRONZE FLIGHT BEARING MAINTENANCE

The swing-out hopper flight is supported by bronze with graphite bearings which require no lubrication.
If a bronze bearing spins inside the retainer, replace it by removing the old bearing and pressing in a new one. See page P-17.

TROUBLE SHOOTING

LOW CAPACITY

The main auger may not be getting enough grain. Check to see that the swing-out hopper intake has not bridged over, restricting flow. The exposed flighting at the swing-out hopper intake should be covered with grain to achieve maximum capacity. Check auger speed. (See page 11). A speed slower than recommended will result in low capacity.

The main auger may be getting too much grain causing "jamming" inside the housing. Reduce grain flow into swing-out hopper.

Is the auger free of any foreign material, such as sacks, tarp corners, etc? A plug of the discharge will cause an auger plug.

EXCESSIVE AUGER NOISE

Damage to the auger housing can occur, causing interference with rotating auger flighting.

Damage can occur to the auger flighting, thus causing noise. Damage usually occurs because of foreign material having been run through the auger. It may be necessary to remove the flighting for inspection.

AUGER LOWERING BY ITSELF

Check all hydraulic fittings, hoses, winch and connections for leaks.

AUGER WILL NOT RAISE OR LOWER

See if the hydraulic coupler is properly attached to the tractor and the tractor reservoir is full of oil. The tractor pressure may be too low. (See page 4 & 6.)

A hydraulic presure by-pass valve is located on the hydraulic motor of the winch. If the auger is full of grain and will not raise, the hydraulic pressure required to raise the auger may exceed the limit of the valve.

IMPORTANT:

An auger should be frequently checked and serviced to operate smoothly. Keep all guards and shields in place. Relace any that are damaged or lost. Any parts for replacment should be replaced with parts of the same type and size. Do not modify or alter any of the auger components.

HOUSING LAYOUT

Choose an area on open, level ground, accessible to chain hoist or other lifting devices, where the auger may be laid out full length. Arrange the tube sections in their approximate positions. See Fig. 1 below.

For ease of assembly, place the tubes on stands or saw horses. This will aid the assembly of the undercarriage. Be sure the supports can bear the weight of the auger tubes, are in alignment and are level from top to top. A stand height of about 36" is recommended.

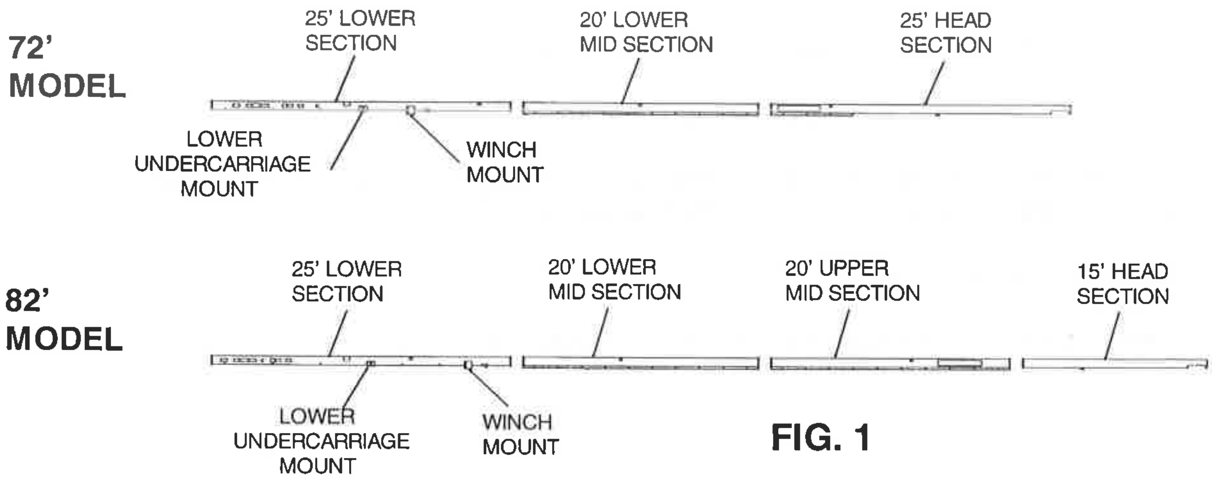


FIG. 1

HOUSING AND FLIGHT ASSEMBLY

Step 1. Bolt the head flight to the next flight section, using two 5/8" x 4" long black hex head capscrews (grade 8) and side depress locknuts. The lower section of flighting will overlap the upper section of flighting about one inch. See Fig. 2.

Step 2. Connect the mid flight sections and the lower flight section to the mid flight section the same way.

Step 3. Slide auger sections together and bolt the auger housing flanges together at each section. Use (12) 3/8" x 1 1/4" long hex head capscrews and nylon locknuts.

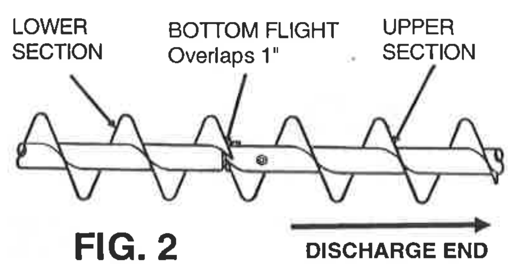
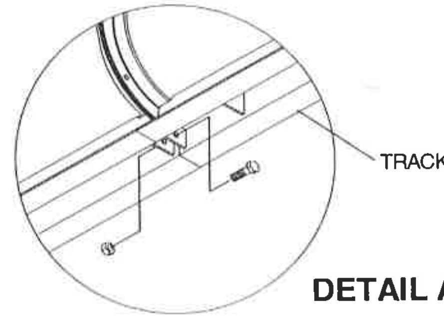


FIG. 2

IMPORTANT: To insure straightness of the final auger housing assembly, it is important to align the individual sections during assembly. After bolting the flight sections together, slide the mating auger housings together, align the sections and then install the flange bolts. **DO NOT** attempt to pull the housing sections into alignment with the flange bolts. Tighten the flange bolts in a pattern where bolts on opposite sides of the tube are tightened one after another, similar to tightening lug nuts on a wheel.

Once all housing segments are assembled, inspect the assembly for straightness. If a connection appears to be out of alignment, loosen that connection, realign the assembly, and then retighten the bolts. If the connection still is out of alignment, loosen the bolts on the connection in question, insert one (or more, as necessary) of the provided shims on the side of the auger that the unit is veering toward, and then retighten the connection. If an alignment problem still exists after this step, contact the factory for further assistance.



DETAIL A

Step 4. Bolt tracks together at each section using a 3/8" x 1 3/4" long hex head capscrew and nylon lock nut (See Detail A in Fig. 1.)

ASSEMBLY INSTRUCTIONS

INLET HOPPER ASSEMBLY

Step 1. Fasten lower stub into lower flight using (2) 5/8" x 4" long HHCS and side depress nuts.

Step 2. Fasten the inlet hopper to the lower auger housing flange with (12) 3/8" x 1 1/4" hex head capscrews and locknuts. See Fig. 3 below.

Step 3. Remove shield from inlet hopper by removing (6) screws.

Step 4. Fasten lower bearing to inlet hopper using (4) 1/2" x 1 1/2" long HHCS.

Step 5. Install sprocket onto lower stub using a 3/8" square x 1" long key. Align sprocket with upper sprocket, which is already installed. Tighten setscrews.

Step 6. Assemble chain onto sprockets.

Step 7. Replace shield on inlet hopper using the (6) screws taken out during step 3.

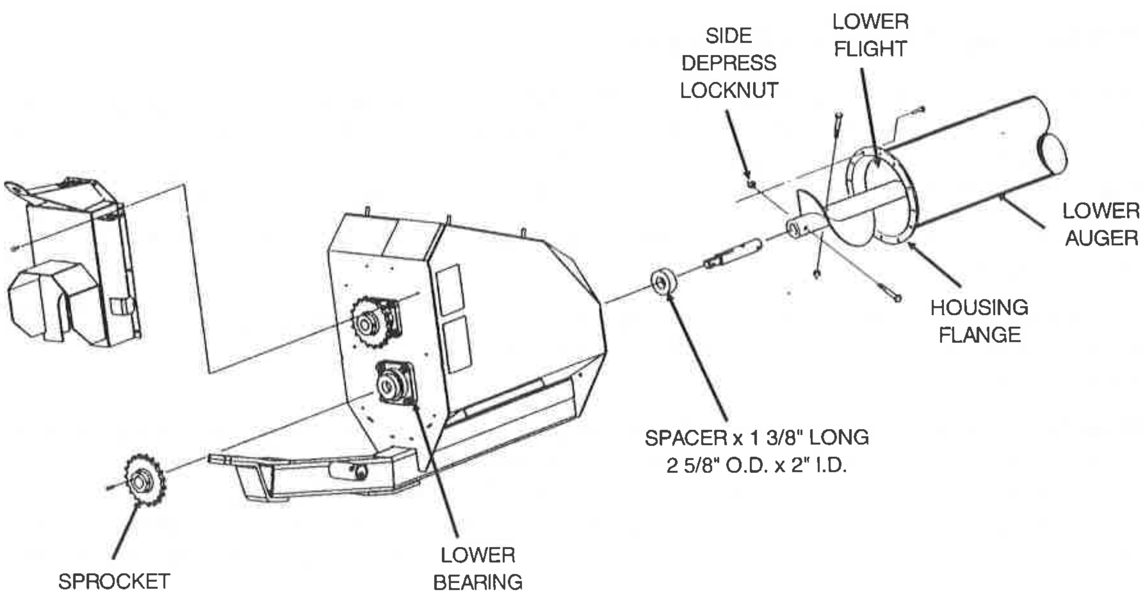


FIG. 3

ASSEMBLY INSTRUCTIONS

HEAD BEARING AND COVER

Step 1. Bolt head stub (Ref. 1) to head flight (Ref. 2) using two 5/8" x 4" long grade 8 hex head capscrews with side depress lock nuts. See Fig. 4 below.

Step 2. Clean and smooth the stub (Ref. 1). Slide bearing (Ref. 5) on as shown, then bolt to the head plate using four 1/2" x 1 1/2" long bolts with nylon lock nuts. Secure the bearing with lock collar.

Step 3. Connect the head bearing cover (Ref. 3) to the head plate with two 5/16" x 3/4" long hex head capscrews with nylon lock nuts.

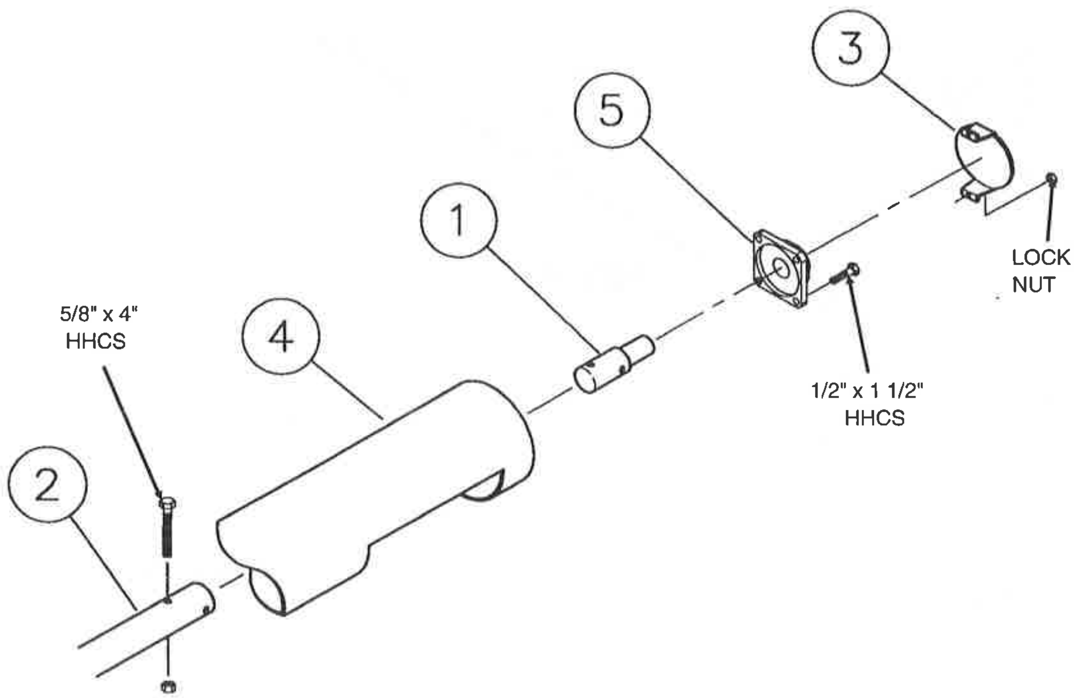
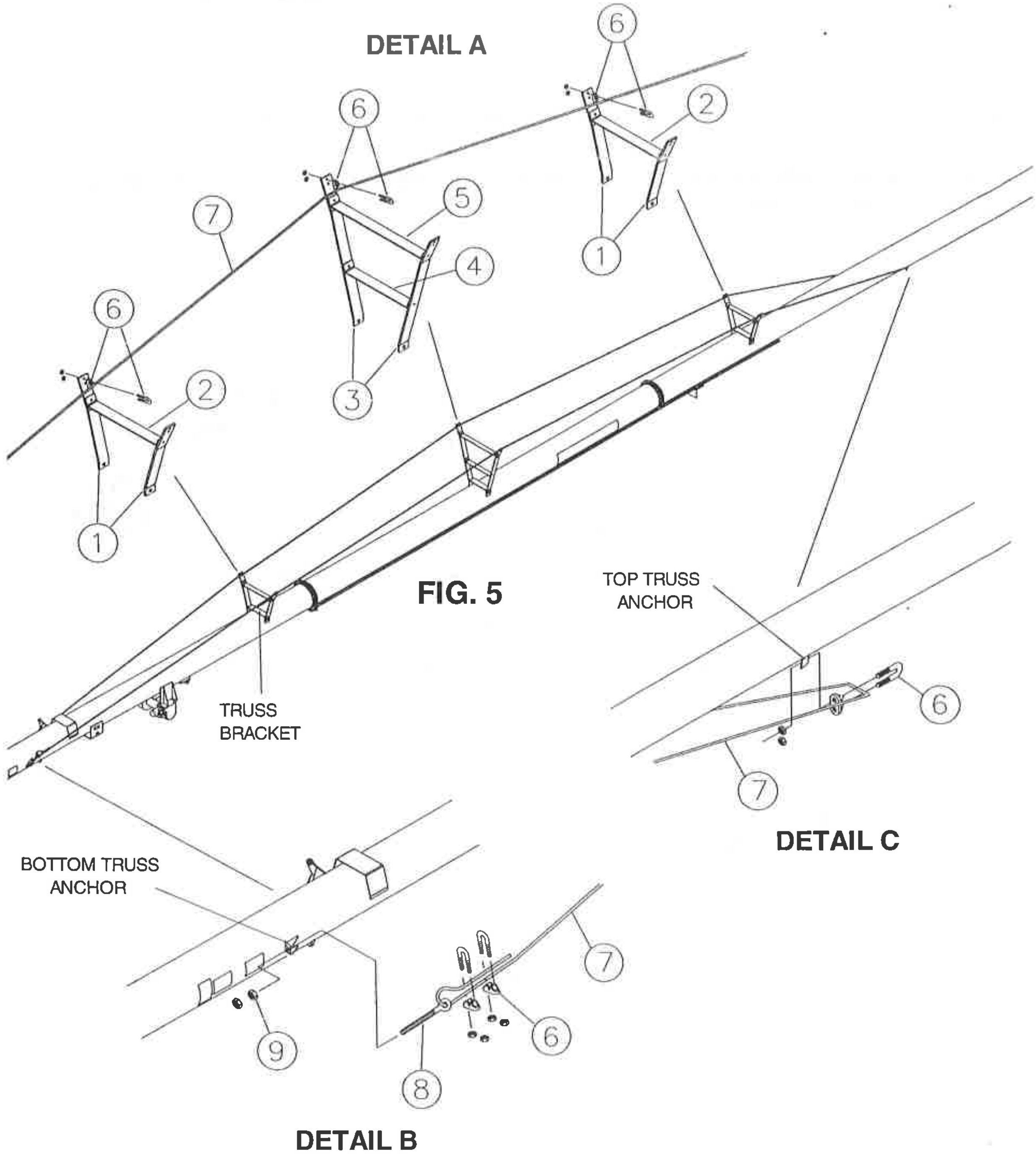


FIG. 4

ASSEMBLY INSTRUCTIONS

TRUSS ASSEMBLY

72' MODEL SHOWN
82' MODEL USES 3 TALL TRUSSES



ASSEMBLY INSTRUCTIONS

TRUSS ASSEMBLY

Step 1. Loosely bolt the truss sides (Ref. 1 & 3) to the truss brackets welded on the auger housings. Each truss side uses two 1/2" x 1 1/2" long (grade 5) hex head capscrews and nylon locknuts to secure it to the truss brackets. Install tall truss sides (32 1/4" long) to middle truss bracket and install short truss side to upper and lower brackets for 72' models. Install tall truss sides (32 1/4" long) to all truss brackets for 82' models. (See Detail A on Page 24).

Step 2. Bolt truss crossbrace between the truss sides with two 3/8" x 1 1/4" hex head long (grade 5) capscrews and nylon locknuts. Use 20" long cross braces (Ref. 2) on upper and lower trusses for 72' models. Use 18 1/4" long crossbrace (Ref. 4) and 26 3/8" long crossbrace (Ref. 5) on middle truss of 72' models and on all three trusses of 82' models.

Step 3. Tighten the truss side hardware.

Step 4. Install eyebolts through bottom truss anchors on the lower auger tube, using two non-lock nuts. See Detail B on page 24.

Step 5. Use the 3/8" diameter cable (Ref. 7) for the truss cable. Find the middle of the cable by folding it in half and matching the length of both ends of the cable.

Step 6. Attach the middle of the cable to the top truss anchor by using a 3/8" cable clamp (Ref. 6). (See Detail C.)

Step 7. Attach truss cable (Ref. 7) to the truss sides by using 3/8" cable clamps. **DO NOT tighten cable clamps at this time.** (See Detail A. on Page 24.)

Step 8. Attach each end of cable to the eyebolts using two cable clamps and **secure the clamp u-bolt against the loose end of the cable**. (See Detail B on page 24.) Before tightening these clamps, pull slack out of each end of the cable pulling on loose end. Then tighten cable clamps on cable.

Step 9. Using eyebolts (Ref. 8), tighten cables until truss is holding the auger straight or until the tube has a slight upward bow at head end. Tighten both eyebolts evenly and make sure the auger is not pulling to one side or the other. Make sure locking nuts on eyebolts are tightened.

Step 10. Tighten all cable clamps on truss sides (Ref. 1 & 3) that were left loose earlier. Make sure all truss fasteners and clamps are tight.

ASSEMBLY INSTRUCTIONS

SPINDLE AND HUB ASSEMBLY

When assembling the heavy duty bearing hub, pack both bearing cones with grease and fill the hub cavity one-third full. Place inner bearing assemblies into the hub, and then press grease seal into hub and carefully reinstall the hub on the spindle. When placing hub on spindle, be careful not to damage the lip of the grease seal. Install outer bearing assembly into the hub. Then slide flat washer on and install slotted nut. Then tighten the slotted nut to seat the bearings until the hub binds as you rotate hub. Back off the slotted nut to the next slot and place a new cotter pin in. Use a 5/32" cotter pin 1 1/4" long. Replace dust cap. See Fig. 6.

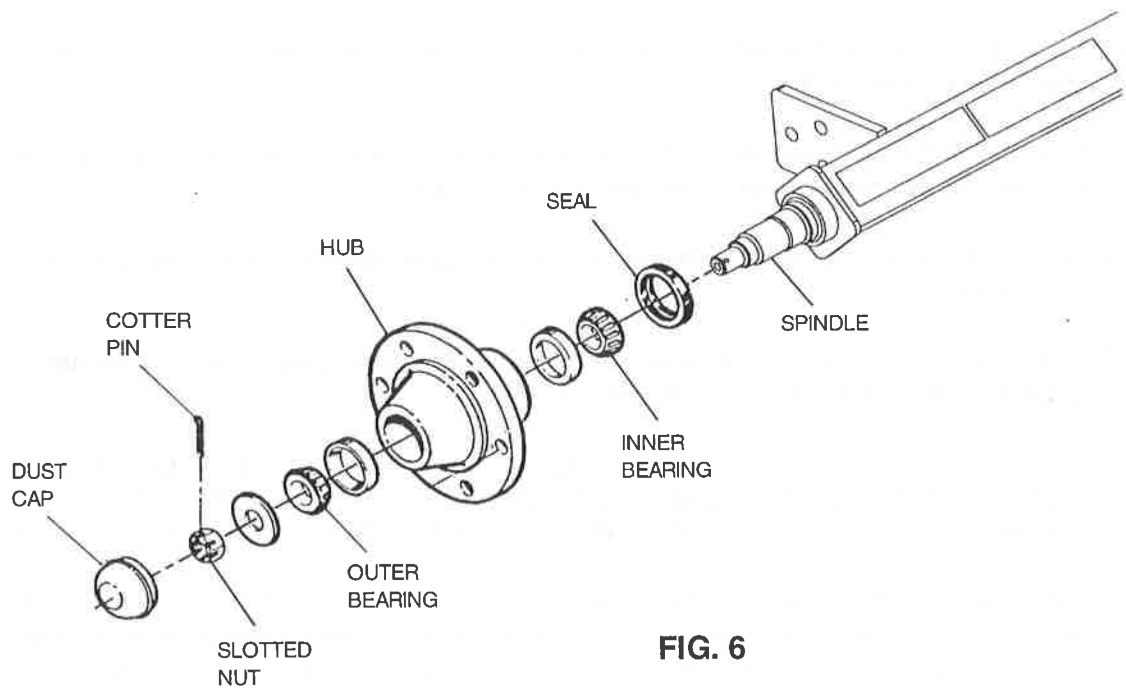


FIG. 6

ASSEMBLY INSTRUCTIONS

UNDERCARRIAGE TROLLEY & STOP ASSEMBLY

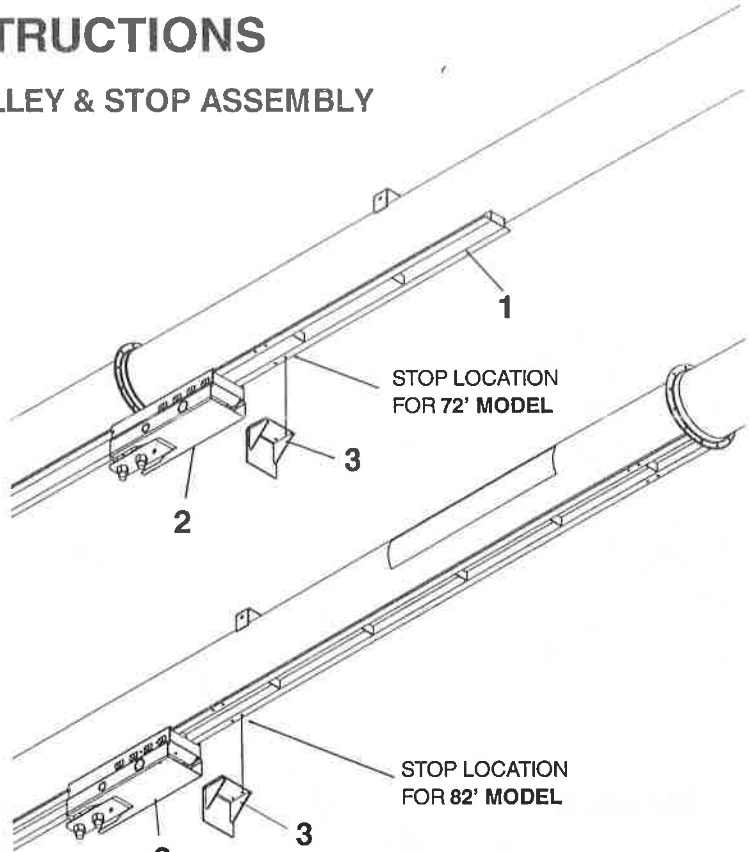


FIG. 7

1. Slide trolley assembly (Ref. 2) onto track (Ref. 1) with the pulleys facing toward the intake end of the auger.
2. Bolt the trolley stop (Ref. 3) to the track (Ref. 1) using four 7/16" x 1 1/4" long hex head capscrews and nylon locknuts.

LOWER WINCH CABLE ASSEMBLY

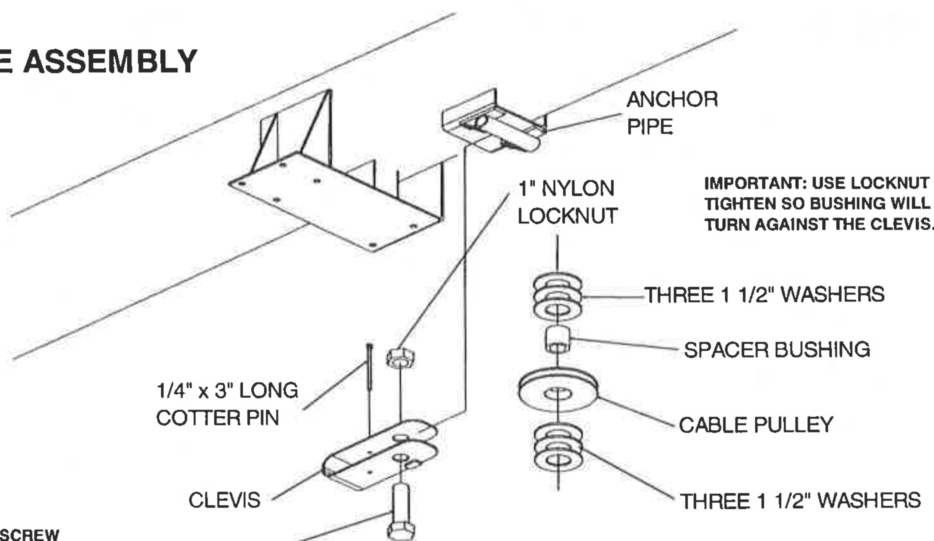
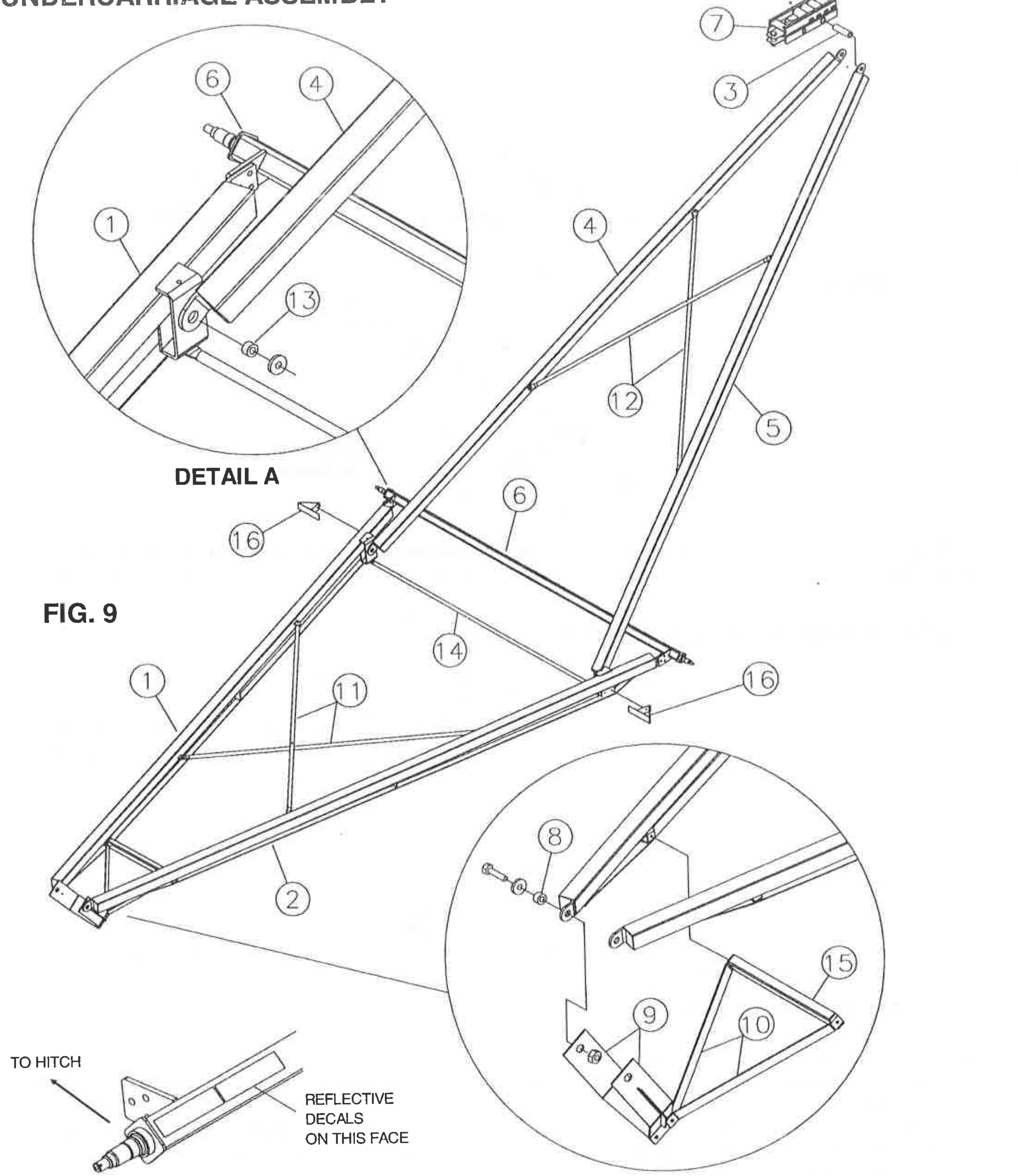


FIG. 8

1. Slide clevis over anchor pipe on track.
2. Insert spacer bushing into cable pulley and slide three 1 1/2" flat washers over the spacer bushing on each side of the cable pulley.
3. Install this assembly, into the clevis and bolt into place using a 1" x 3 1/2" long hex head capscrew and nylon locknut. (NOTE: Install bolt so that the head of the bolt is down and the nut fits up between the angles of the track. This is necessary for cable clearance.)
4. Install 1/4" x 3" long cotter pin in clevis.

ASSEMBLY INSTRUCTIONS

UNDERCARRIAGE ASSEMBLY



AXLE DETAIL

DETAIL B

A0004538

03288A1

ASSEMBLY INSTRUCTIONS

UNDERCARRIAGE ASSEMBLY

When assembling the undercarriage, leave all bolts loose until all components of carriage are together. This will make assembly easier. Refer to Fig. 9 on Page 28 for assembly.

1. Bolt the axle (Ref. 6) to the lower arms (Ref. 1 & 2) using six 5/8" x 2" long hex head capscrews & nylón locknuts. Make sure axle is oriented so that reflective decals are on top side. (NOTE: Arms bolt on inside of plates on the axle.)
2. Bolt crossbrace tubes (Ref. 11) (103 3/4" long on 72' model and 109 1/4" long on 82' model) to lower arms using four 1/2" x 1 1/2" long hex head capscrews, 1/2" flatwashers and 1/2" nylon locknuts. (NOTE: All x-brace tubing has a hole located near the center of tube, but is offset toward one end. Orient these x-brace tubes so that shortest distance to this hole is toward narrow end of carriage.)
3. Bolt cross brace tubes together using 1/2" x 3 1/4" long hex head capscrew and nylon locknut.
4. Attach upper lift arms (Ref. 4 & 5) to lower arms (Ref. 1 & 2) using a bushing (1 1/2" O.D. x 1 1/6" I.D. x 11/16" long Ref. 13), a 1" x 3" long hex head capscrews, flat washer and nylon locknut.) (See Detail A). The bushing installs inside of the hole of upper lift arm and the flatwasher is positioned on the inside of the lift arm.
5. Bolt x-brace tubes (Ref. 12) to upper lift arms using 1/2" x 1 1/2" long hex head capscrews, 1/2" flatwashers & 1/2" nylon locknuts.

   On 72' model augers, use 95 3/4" long x-braces and on 82' model augers, use 103" long x-braces.
6. Bolt x-brace tubes together using 1/2" x 3 1/4" long hex head capscrews and nylon locknuts.
7. Attach connecting tube (Ref. 14) between lift arms using two 1/2" x 1 1/2" long hex head capscrews and 1/2" nylon locknuts.
8. Bolt two halves of the lower pivot support bracket (Ref. 9) together using one 5/8" x 2" long hex head capscrew and nylon lock nut in hole closest toward the intake end.
9. Position undercarriage under the auger housing. Move trolley toward the discharge end of the track until it is against the trolley stop. Use a clamp or some means of temporarily securing the trolley to prevent it from sliding toward the intake end.
10. Install pivot bushing (Ref. 3) (1 1/2" O.D. x 1 1/6" I.D. x 7 5/8" long) into the trolley (Ref. 7). Attach upper lift arms of carriage to the trolley using a 1" x 11" long hex head capscrew and nylon locknut. Tighten bolt completely.
11. Tighten all bolts in the upper lift arm assembly, including the bolts that connect the upper and lower arms together.
12. Now raise the auger with a hoist at a point approximately two thirds of the distance toward the discharge end. Raise auger high enough to make lower arm connection to the mount on the auger housing.
13. Attach the lower pivot support bracket (Ref. 9) and the lower arms of the undercarriage (Ref. 1 & 2) to the mount using a bushing (1 1/2" O.D. x 1 1/16" I.D. x 15/16" long) (Ref. 8) that goes inside the holes of the support bracket and lower lift arm ear. Use a 1" x 3" long hex head capscrew on each side with a flatwasher under the head of the bolt on the outside and a nylon locknut on the inside. (See Detail B).
14. Bolt lower pivot x-brace straps (Ref. 10) to the lower pivot support bracket (Ref. 9), one on each side of the bracket, using a 5/8" x 2" long hex head capscrew and nylon locknuts.
15. Install lower pivot cross support (Ref. 15) with lower pivot x-brace straps (Ref. 10) on each side in between lower arms of undercarriage using two 1/2" x 1 1/2" long hex head capscrew and nylon locknuts.
16. Install reflector brackets (Ref. 16) using two 5/16" x 1" long hex head capscrews and nylon locknuts.
17. Tighten all lower arm assembly bolts and remove temporary clamp used to hold the trolley in place.
18. Mount wheels to hubs using 6 lug bolts to each hub.

ASSEMBLY INSTRUCTIONS

WINCH & CABLE CLAMP ASSEMBLY

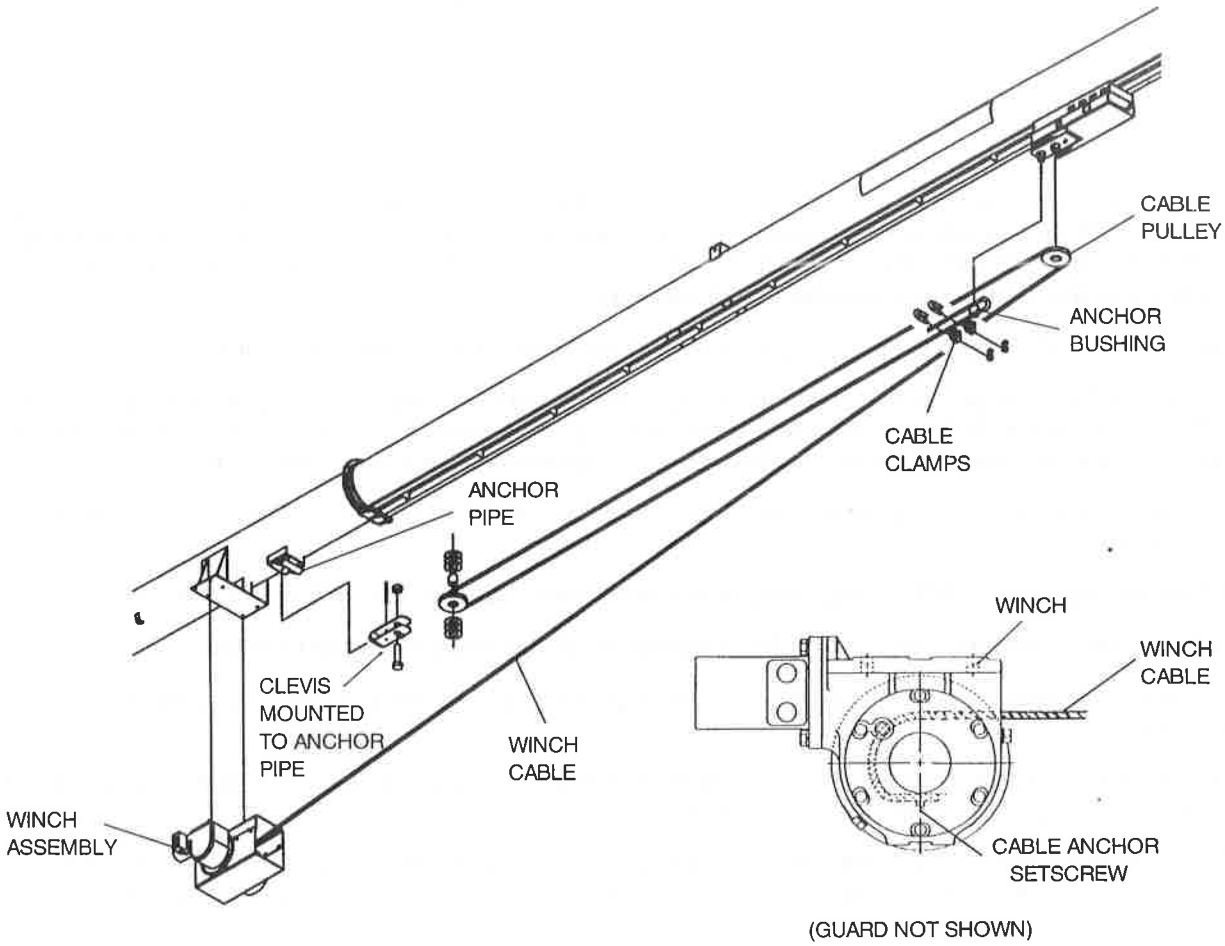


FIG. 10

1. Route cable from where the winch mounts to the auger through the cable pulleys and anchor to the spacer bushing in the trolley. Secure the cable to the trolley with two cable clamps, with the u-bolt against the loose end of the cable.

2. Remove shipping bolts from winch assembly. Place winch assembly against mount bracket on tube. Secure to winch mounting using six 1/2" x 2 1/2" hex head capscrews and nylon locknuts. Orient winch so that hydraulic motor is facing toward the intake end of the auger.

3. Attach cable to the drum. Pass the free end of the wire cable through the small opening of the cable drum anchor pocket. Lock the cable in the the drum by tightening the cable anchor setscrew. See Fig. 10. Make sure cable will wind onto the top of the winch drum as the auger is raised.

ASSEMBLY INSTRUCTIONS

HYDRAULIC HOSE ASSEMBLY

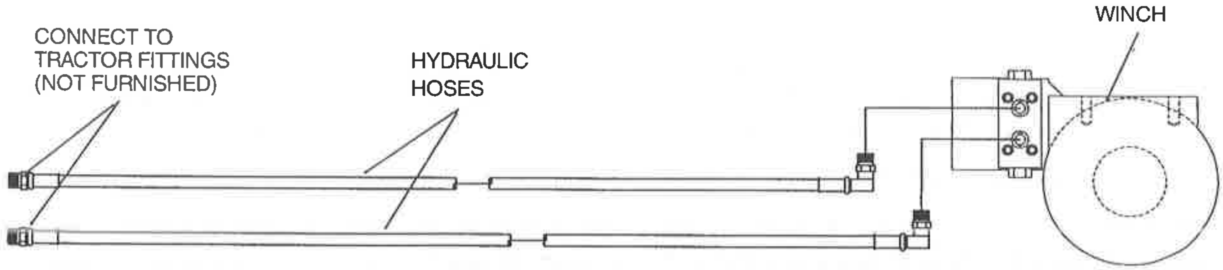
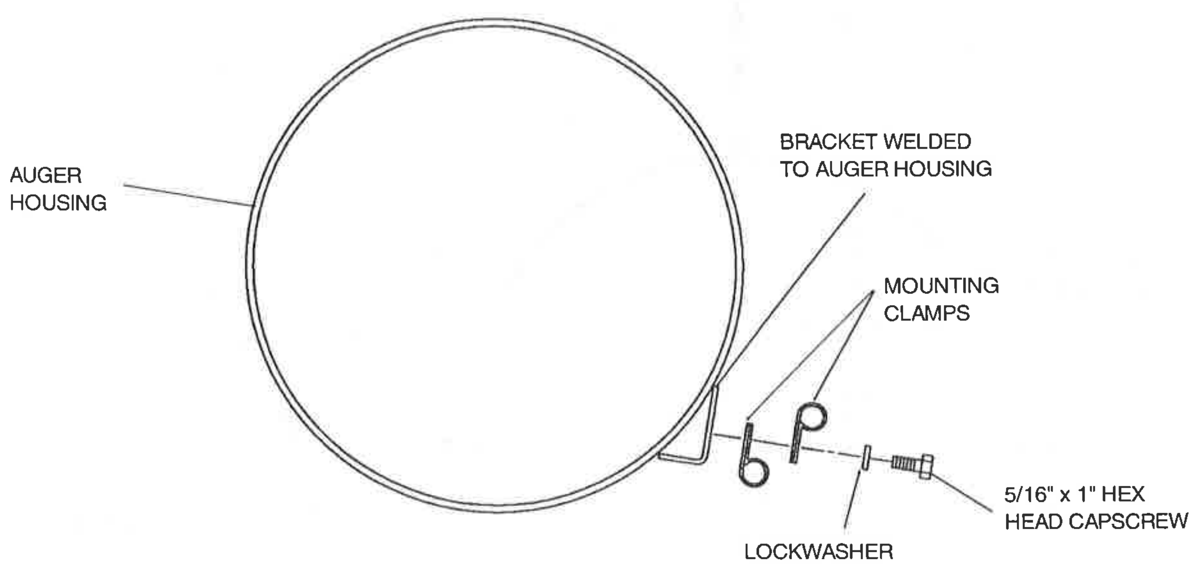


FIG. 11

Step 1. Attach hydraulic hoses to the winch. Use the end of the hose that has the 90° fitting on the end. (See Fig. 11).

Step 2. Starting at the winch end of the hose, fasten the hydraulic hoses to the tube housing using mounting clamps and 5/16" x 1" long (grade 5) hex head capscrews with lockwashers. See Fig. 12.



HYDRAULIC HOSE CLAMP DETAIL

FIG. 12

ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER LIFT ARM, CABLE AND WINCH ASSEMBLY

NOTE: The swing-out hopper can be stored either on the right or left side of the main auger.

Step 1. Determine from what side of the auger you wish to raise the swing-out hopper. Install the lift arm on the mounting bracket from that side of the auger. Secure the lift arm to the mounting bracket with two 1/2" x 7 5/8" long pins and four 1/2" flatwashers, secured in place using four hair pins. See Fig. 13.

Step 2. Install "L" shaped pin (1/2" dia. x 5 1/4" long) into "U" shaped bracket on end of lift arm. Secure with hair pin.

Step 3. Hook clevis plates over hanger loop on top side of the auger housing. Then assemble bushing and cable pulley between the clevis plates using 1/2" x 2" long (grade 5) hex head capscrew and nylon locknut. IMPORTANT: Tighten so bushing will not turn against the clevis plates. Torque to 80 ft./lbs. Check to see that the clevis plates are captured on the hanger loop and cannot come off.

Step 4. Fasten winch plate to inlet hopper using four 3/8" x 1" long hex head capscrews and locknuts.

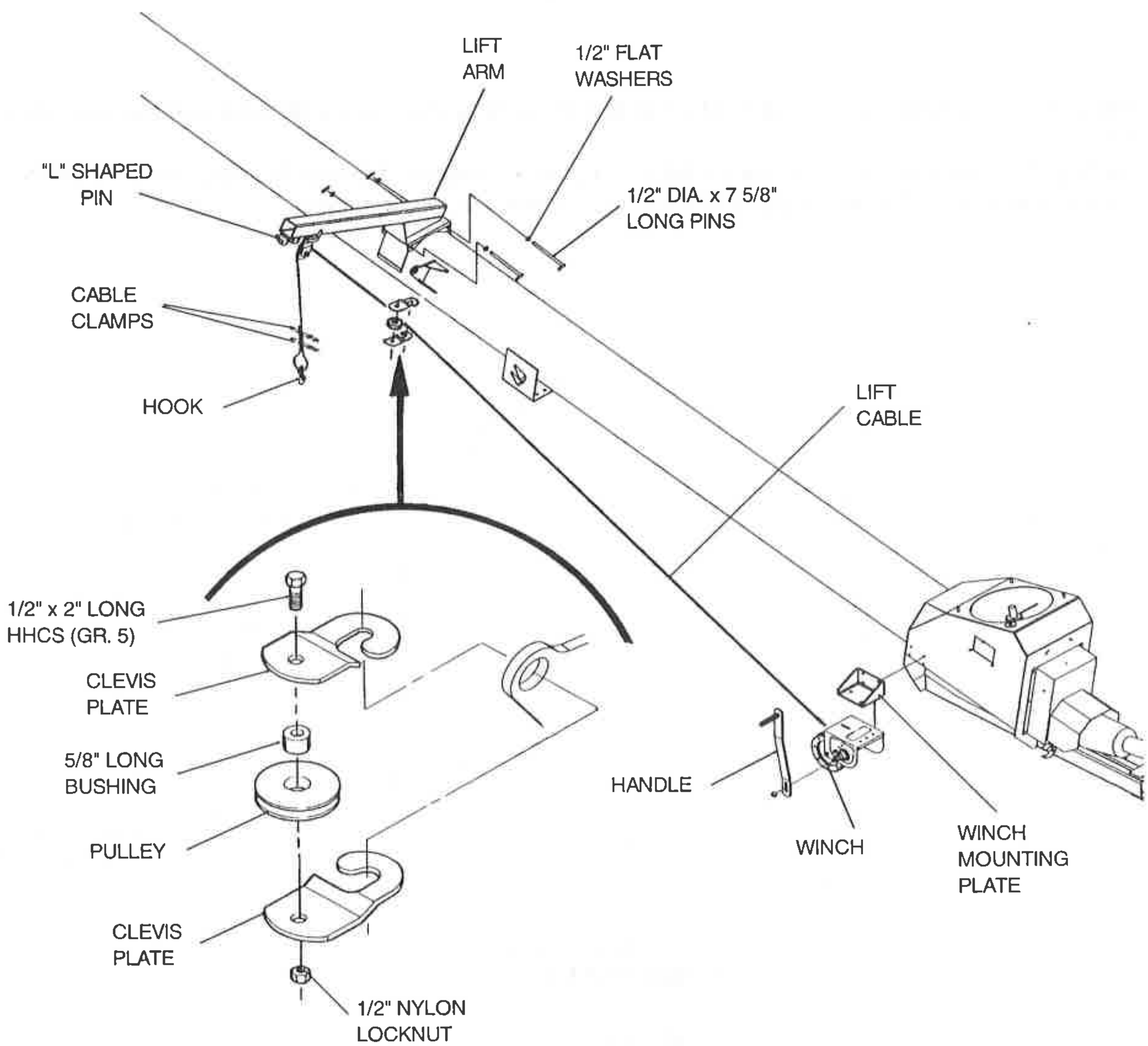


FIG. 13

ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER LIFT ARM, CABLE AND WINCH ASSEMBLY - CONT.

Step 5. Assemble handle to winch, aligning slot of handle with turned-down portion of pinion shaft. Use hex head nut to secure handle to winch. See Fig. 14. For additional winch information, follow the instructions and precautions listed in the material supplied by the winch manufacturer.

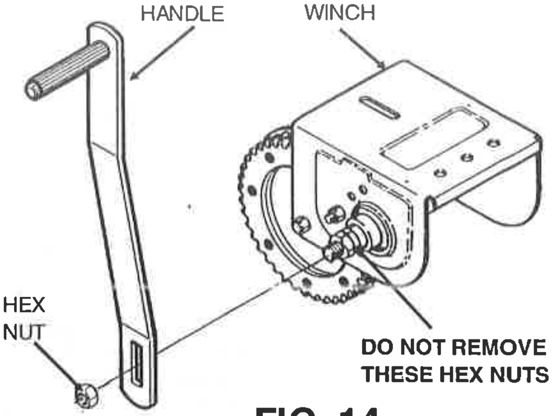


FIG. 14

Step 6. Attach 1/4" x 28'-0" long cable to winch drum so cable will wrap under drum when turning handle in a clockwise direction. See Fig. 15. From inside of drum, insert the cable through one round hole in the drum side until it extends 1" past the two square holes. Next clamp the cable to the outside of the drum with the cable keeper, using two 3/16" x 3/4" carriage bolts with heads inside the drum, as shown.

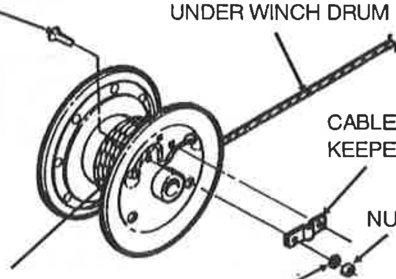


FIG. 15

CAUTION: The cable keeper alone will not hold the weight of the hopper. There should be enough cable so that when the swing-away hopper is all the way down, there are at least 3 turns of cable on the winch drum. Never let the cable all the way out. Always keep a minimum of three (3) turns of cable on the winch drum. If there are not (3) turns of cable around the winch drum when the swing-away hopper is fully lowered, then the cable must be replaced with a longer cable.

Step 7. Mount the winch to winch mount using three 3/8" x 1" long bolts with flatwashers and nylon locknuts.

Step 8. Rig the lift cable from the winch through the pulley and clevis on top of the auger then through the pulley and clevis assembly at the end of the lift arm. (See Fig. 13).

Step 9. Attach cable hook to lift cable using two 1/4" cable clamps. Secure the clamp u-bolt against the loose end of the cable. (See Fig. 16).

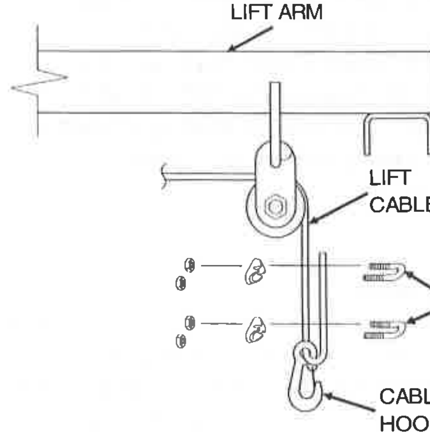


FIG. 16

ASSEMBLY INSTRUCTIONS

PTO DRIVELINE, SHIELD AND JACK ASSEMBLY

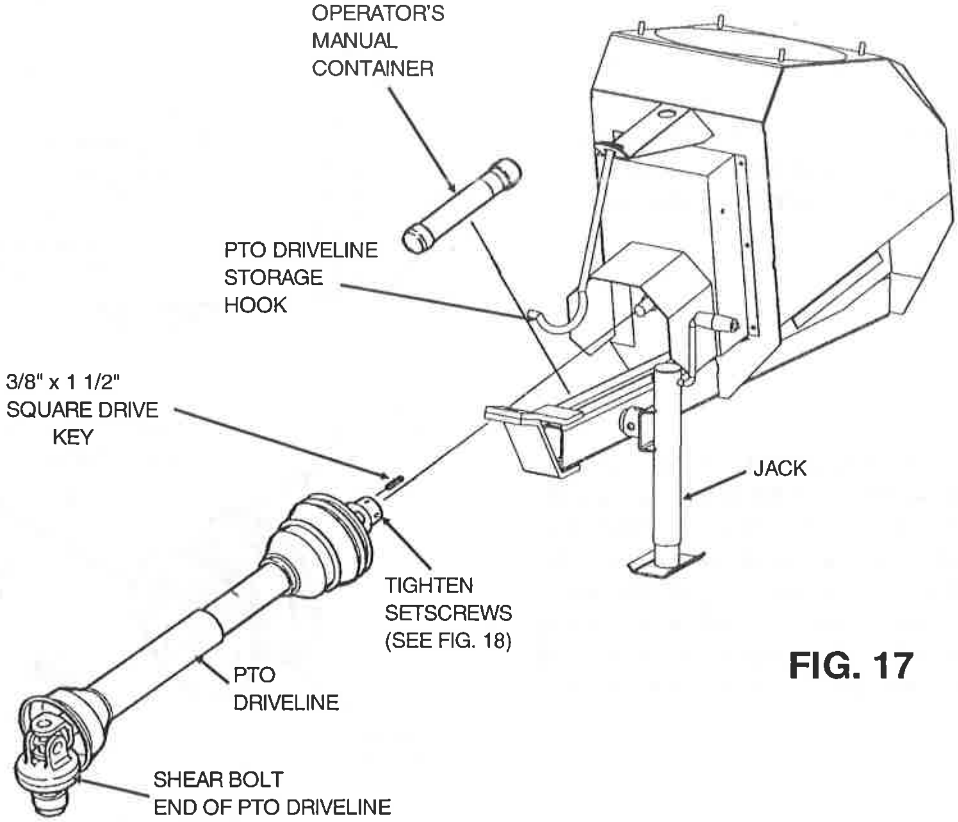


FIG. 17

Step 1. Fasten the PTO driveline to the auger drive stub using a 3/8" x 1 1/2" drive key and setscrews. **IMPORTANT: For the setscrews in the PTO driveline yoke to be properly engaged on the input shaft, slide the yoke on until one setscrew will sit on the flat portion of the enclosed drive input shaft and the other setscrew on the 3/8" x 1 1/2" key. DO NOT extend the input shaft beyond the inside end of yoke. See Fig. 18.**

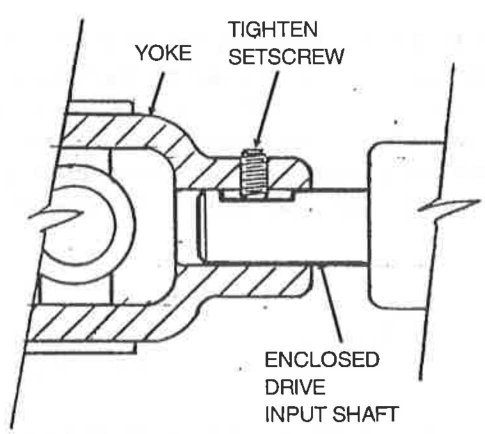


FIG. 18

IMPORTANT NOTE:

The PTO driveline is equipped with a shear bolt at the tractor connection. The shear bolt limits damage to the auger if the auger becomes plugged or subjected to high loads. It is important to **use the correct replacement bolt** (of the proper size and strength) to ensure that the shear device will protect the auger and operator. Extra shear bolts are provided with the auger and are stored in the operator's manual container located on the main auger inlet hopper.

ASSEMBLY INSTRUCTIONS

PTO DRIVELINE/SHIELD AND JACK ASSEMBLY - CONT.

Step 2. Install the storage hook into the storage hook bracket on the inlet hopper with the hook end toward the ground.
Step 3. Place PTO driveline into storage position.
Step 4. Attach jack to hitch tube.
Step 5. Snap the operator's manual container into holder on bottom side of inlet hopper.

PTO DRIVELINE (STORAGE)

The PTO driveline should be placed in the storage position when not attached to the tractor.

Tilt the PTO driveline up and swing support hook under the driveline to support the weight of the driveline. See Fig. 19.

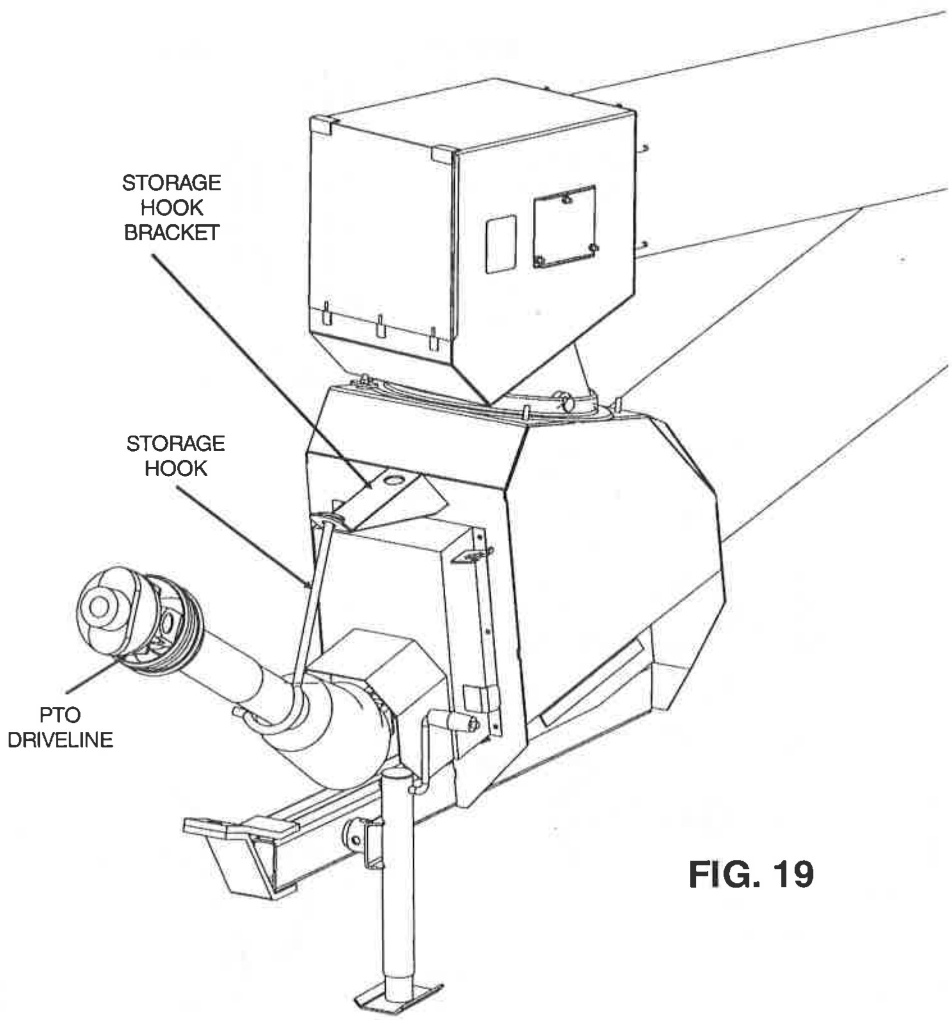


FIG. 19

ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER AND INCLINE TUBE ASSEMBLY

Step 1. Temporarily remove the access door on the side of the spout. See Fig. 21.

Step 2. Remove square head solid plug from gearbox top and install vented plug.

Step 3. Remove the tape that is holding the # 1210 woodruff key to the spout gearbox output shaft. Place the woodruff key into the keyseat, if it is not already in place.

Step 4. Attach swing-out hopper incline flight to gearbox output shaft, lining up the keyseat with the key in the shaft. Use a 1/2" x 3 3/4" long (gr. 5) hex head capscrew with side depress locknut to secure the connection.

Step 5. Attach the incline tube ring to the spout using studs welded to spout with 7/8" long spacer bushings, flat washers and 3/8" nylon locknuts as shown in Figs. 20 & 21.
IMPORTANT: Be sure to install the spacer bushings between the back of the spout and the incline tube ring because the spout **MUST BE ABLE TO SWIVEL** on the tube.

Step 6. Replace the spout access door removed in Step 1. Use three 5/16" x 3/4" long hex head capscrews with nylon locknuts.

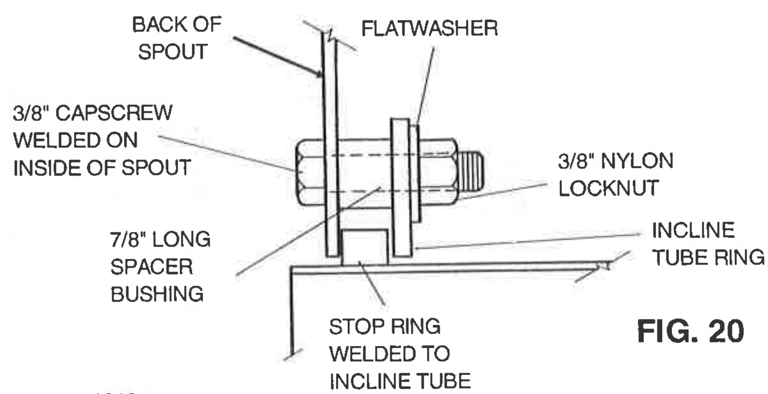


FIG. 20

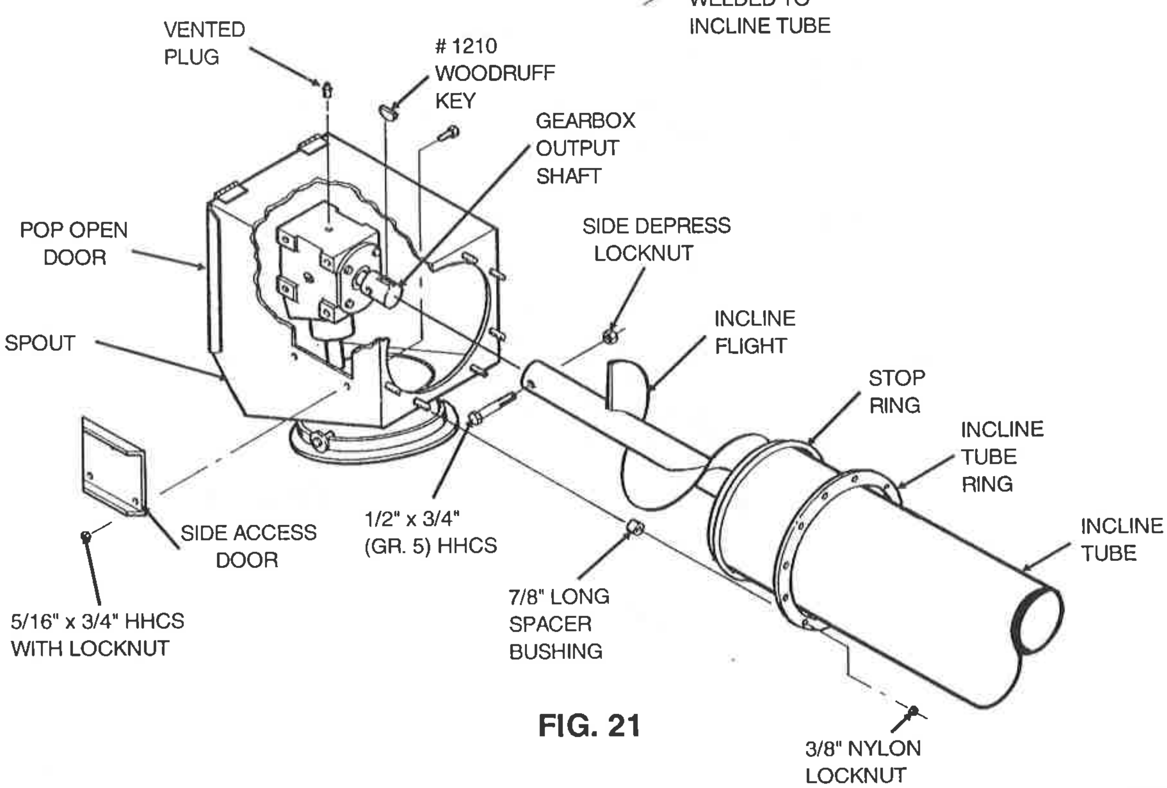


FIG. 21

02591A4 02594A4 A0004546

ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER AND INCLINE TUBE ASSEMBLY

Step 1. Install the hopper wheels with the four 5/8" x 9 3/4" long pins, four spacer tubes (7/8" long) and four 2" hair pin cotters. Install the hopper wheels such that the front wheels are tilted in toward the incline tube and the rear wheels are tilted away from the hopper chain guard.

NOTE: There are two installation heights for the hopper wheels. For the shortest hopper profile, use the upper set of holes.

Step 2. Bolt the incline tail stub into the incline flight using four rubber sleeves, two 1/2" x 4" long hex head capscrews, flat washers and nylon locknuts. Fig. 22.

IMPORTANT: Tighten locknuts so the flat washers are firmly against the rubber sleeves. **DO NOT** tighten so tight that the flat washers are against the flight tube. Leave about 1/16" gap.

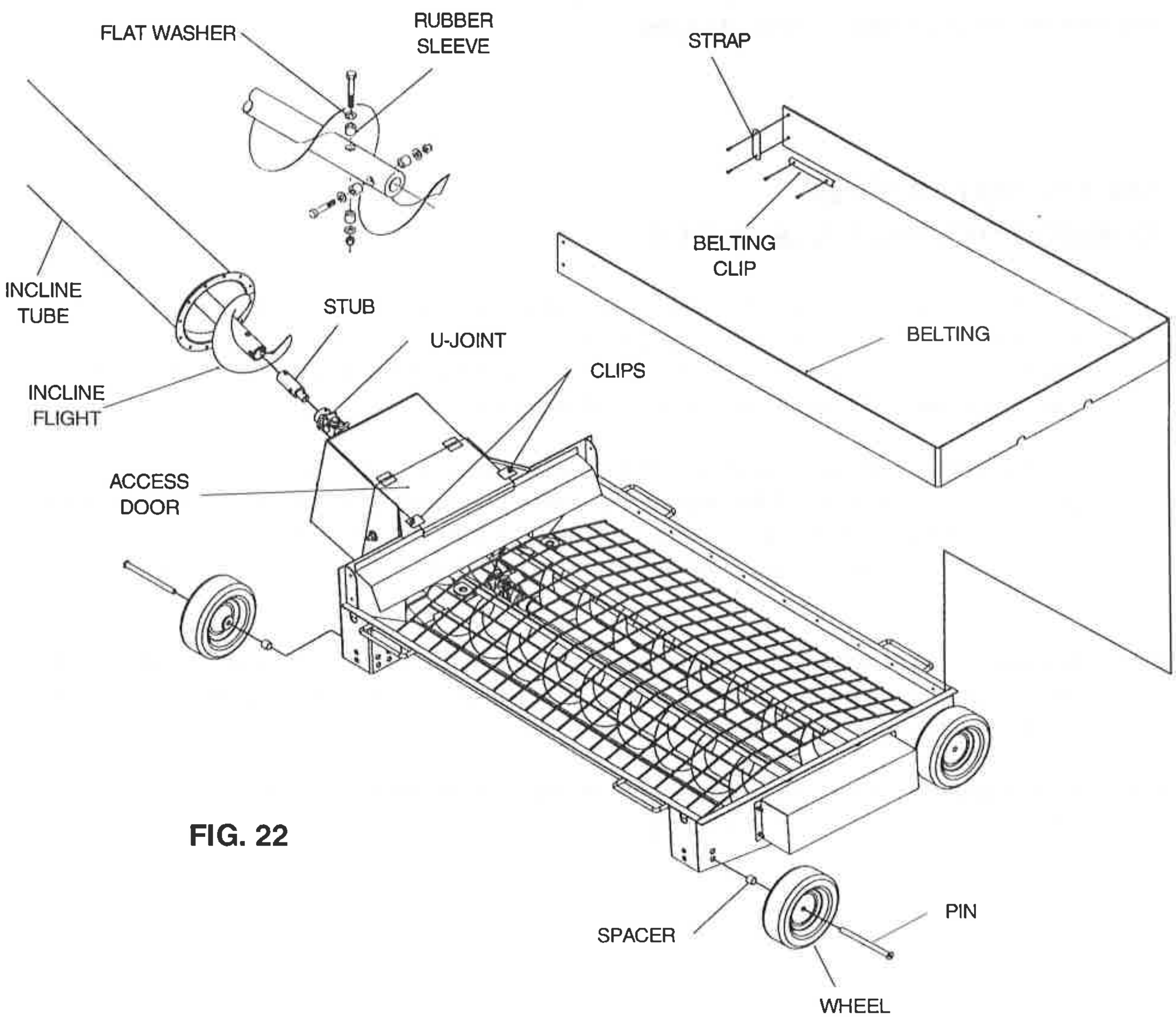


FIG. 22

ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER AND INCLINE TUBE ASSEMBLY - CONT.

Step 3. Loosen nuts on access door clips and rotate clips to open access door. Slide incline tube and flight assembly into incline box weldment of swing-out hopper.

Step 4. Fasten u-joint to the incline tail stub and stub in short flight using two 3/8" x 3" long hex head capscrews & nylon locknuts.

Step 5. Fasten the lower end of the incline tube to the front of the swing-away hopper. Use twelve 3/8" x 1 1/4" long nylon locknuts. NOTE: Install bolt heads on the inside.

Step 6. Close access door and rotate clips to hold door closed. Snug the nuts down against the clips.

IMPORTANT: **DO NOT** tighten the nuts down. The hinged cover must be able to slide under the clips when the incline tube is tilted at different angles.

SWING-OUT HOPPER RUBBER BELTING ASSEMBLY

Step 1. Install the rubber belting into the inside of the swing out hopper. Use (13) attachment clips to install the belting. Two (2) 1/4" x 1" long hex head capscrews and nylon locknuts are used for each clip. Loosely attach each clip with points of clips up and with bolt heads inside the hopper. Use bolt holes positioned around upper edge of hopper.

Step 2. Set the belting inside the clips with the belting edge resting on the bolts. The belting does not go across the output end of the hopper. The belting is notched to accommodate the center guard support at the rear of the hopper. Begin installing the belting at this point and work each way toward the hopper discharge. Position the belting evenly around the hopper and through the corners.

Step 3. Bolt each end of the belting to the inside corner at the output end of the hopper using a flat strap on the inside of the belting. Attach the strap & belting to the hopper using (2) 1/4" x 1" long hex head capcrews & nylon locknuts.

Step 4. Tighten the bolts and nuts to where the clip points draw into the belting and the smooth edge of the clips is in contact with the belting.

ASSEMBLY INSTRUCTIONS

INCLINE TUBE TO MAIN INLET HOPPER ASSEMBLY

Step 1. Place the 1" O.D. x 1/4" thick flat washers on the 3/8" threaded studs on the top of the main inlet hopper. See Fig. 23.

Step 2. Lift the spout end of the incline tube assembly with a sling and position it directly over the opening in the main inlet hopper.

Lower carefully and align the u-joint with the splined gearbox shaft in the main inlet hopper. Use the pop-open door to gain access to the u-joint when lowering the incline tube.

Completely lower until the spout flange sits flat on top of the main inlet hopper.

Step 3. Secure spout flange to top of main inlet hopper by using four 2" O.D. flat washers and locknuts. **IMPORTANT: The incline tube spout should be free to rotate on the top of the main inlet hopper.**

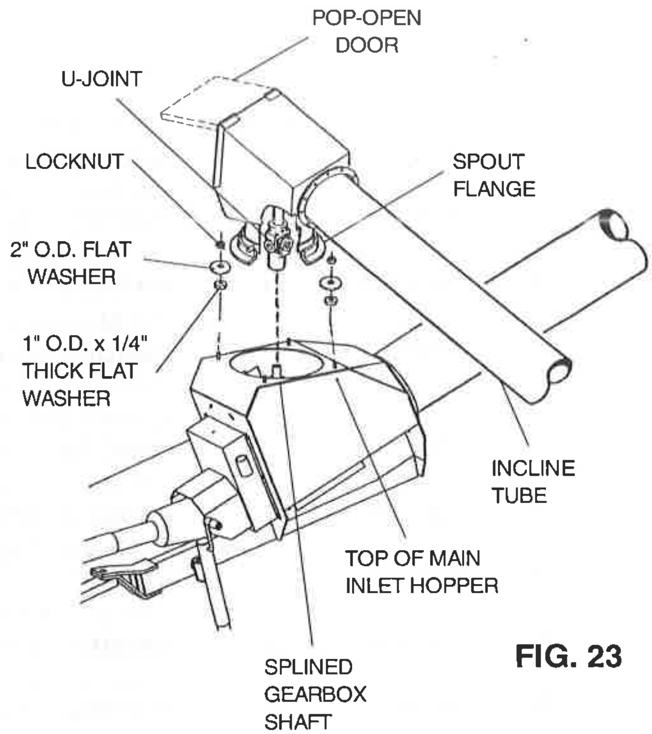


FIG. 23

NOTICE: TO DEALER / ASSEMBLER

The assembly to the auger is complete if all the applicable assembly steps in this manual have been followed:

Before delivery to the owner, it is a good practice to check the following:
A. Be sure all safety shields and devices are installed properly.

B. Check all safety decals to see if they are clean and readable. If any are missing, damaged, painted over, etc., replace them. (See pages P-1 thru P-4.) Decals may be obtained from your dealer, distributor or ordered from the factory.

C. Check all bolts and fasteners to see they are tightened and secured properly.

D. Check that the Operator's Manual container (with Operator's Manual inside) is installed in its holder on the main auger inlet hopper. (See Fig. 17 on page 34.)

Deliver this Assembly and Operator's Manual to the owner along with the auger.

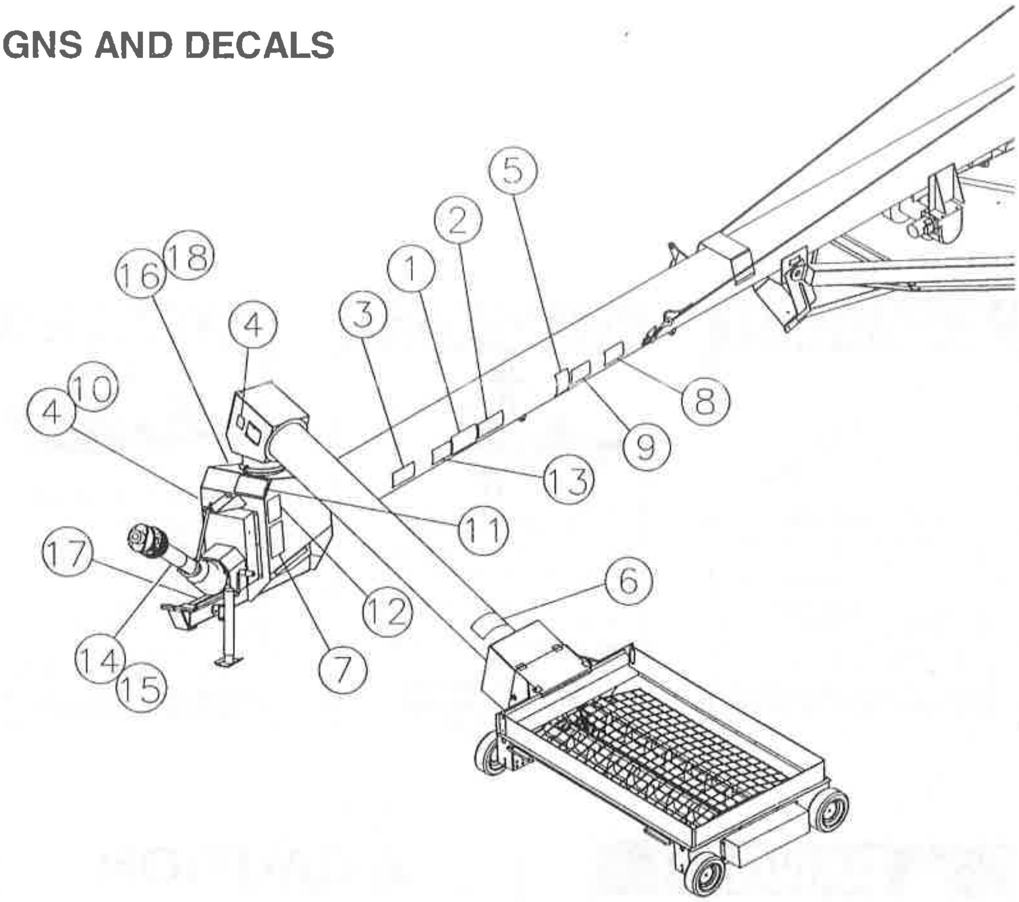
PARTS LIST

SAFETY SIGNS AND DECALS

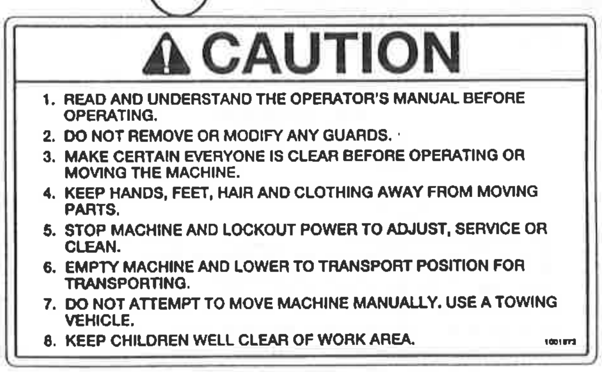
Check all safety signs and replace any that are worn, missing or illegible. The safety sign locations are shown on page P-2. Copies of the Safety Signs are shown on page P-2, P-3 & P-4. Safety signs may be obtained from your dealer or ordered from the factory.

REF.	PART	QTY.	DESCRIPTION	SIZE
1	1001973	1	**CAUTION - GENERAL STATEMENTS 1-8** (On Main Auger Housing)	4 3/4" x 8"
2	1001980	1	**DANGER - BEWARE OF POWER LINES** (On Main Auger Housing)	4" x 8"
3	1001974	1	**WARNING - ESCAPING HYDRAULIC OIL** (On Main Auger Housing)	4" x 7 1/4"
4	1001987	3	**DANGER - DO NOT OPERATE WITH COVER OPEN!** (One on side of Inlet Hopper) (One on side of Incline Tube Spout)	4" x 5 1/2"
5	1001981	1	**DANGER - UPENDING HAZARD** (On Main Auger Housing)	4 1/2" x 6 1/4"
6	1001985	1	**DANGER - ROTATING AUGER** (On Incline Tube)	4 1/2" x 6 1/4"
7	1001983	1	**DANGER - ROTATING DRIVE LINE** (One on back of Inlet Hopper)	4 1/2" x 6 1/4"
8	1001984	1	**DANGER - DO NOT ATTEMPT DISASSEMBLY** (On Main Auger Housing)	4" x 6"
9	1001975	1	**WARNING - THE TRANSPORT WIDTH** (On Main Auger Housing)	4" x 6"
10	1004460	1	**CAUTION - ROTATING WINCH HANDLE** (One on side of Inlet Hopper)	4" x 7 1/4"
11	1013783	1	**NOTICE: AVOID SHARP TURNS** (On back of Inlet Hopper)	5 1/4" x 7"
12	1001986	1	**DANGER - ROTATING AUGER INSIDE OF HOPPER** (One on side of Inlet Hopper)	4" x 5 1/2"
13	1005324	1	**DANGER - "STOP", IF ANY GUARDS, SHIELDS...** (On Main Auger Housing)	4" x 6"
14	13-10021	1	**DANGER - ROTATING DRIVELINE** (On PTO Driveline Shield)	3 1/2" x 5"
15	13-10022	1	**DANGER - SHIELD MISSING** (Under PTO Driveline Shield)	
16	1002805	1	**CAUTION - CABLE OUT/CABLE IN** (On Winch Body)	- -
17	1004461	1	**OPERATOR'S MANUAL INSIDE** (On Manual Container)	1 1/2" x 7 1/2"
18	2169A1	1	**CAUTION - WINCH OPERATION** (On Winch Handle)	- -
- -	1021179	4	**RED REFLECTIVE DECAL** (On back of Axle and back of Undercarriage Stop)	2" x 9"
- -	1021180	- -	**YELLOW REFLECTIVE DECAL** 12 on 72' Models & 14 on 82' Models (Along sides of auger housing and undercarriage, on forward facing brackets attached to undercarriage)	2" x 9"
- -	1021181	3	**ORANGE FLOURECENT DECAL** (On back of Axle)	2" x 9"

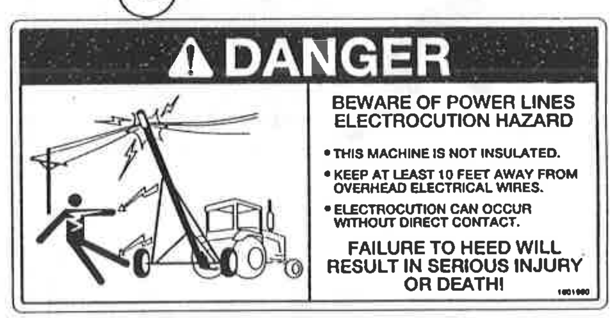
SAFETY SIGNS AND DECALS



1



2



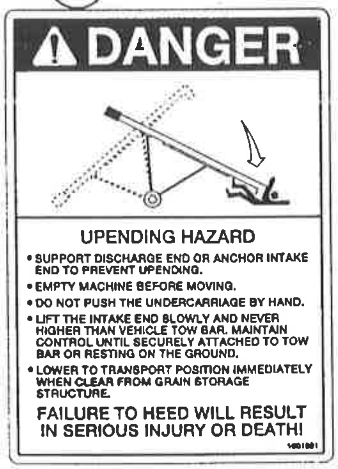
3

4

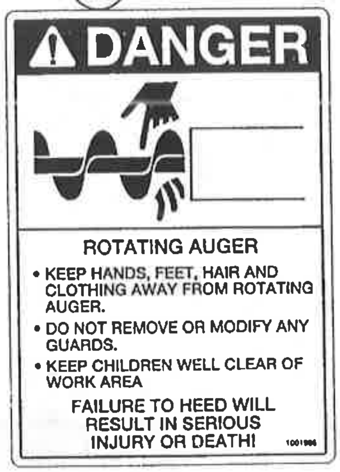
PARTS LIST

SAFETY SIGNS AND DECALS

5



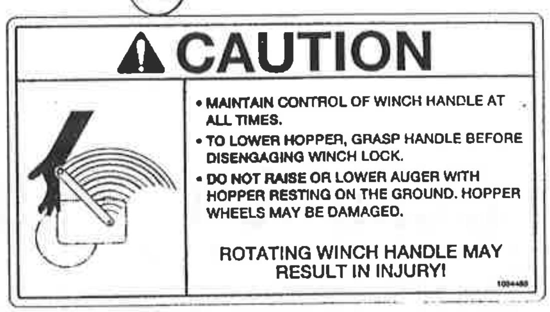
6



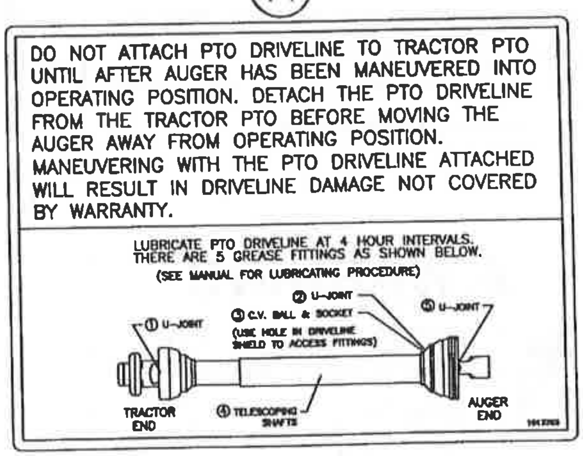
7

8

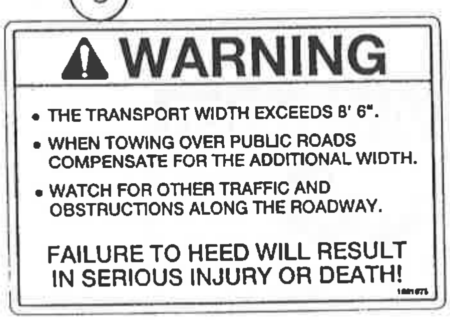
10



11



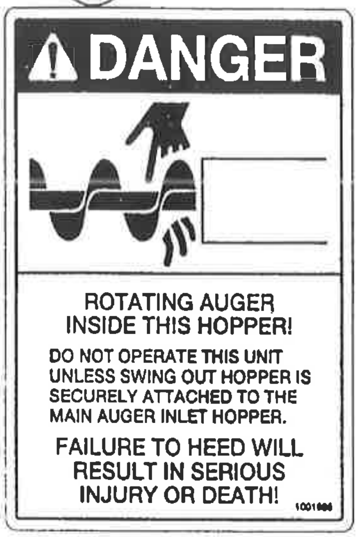
9



PARTS LIST

SAFETY SIGNS AND DECALS

12



13

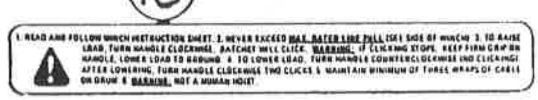
14

16

15

17

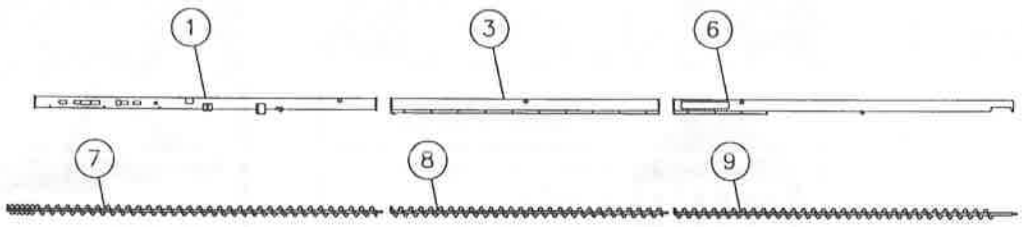
18



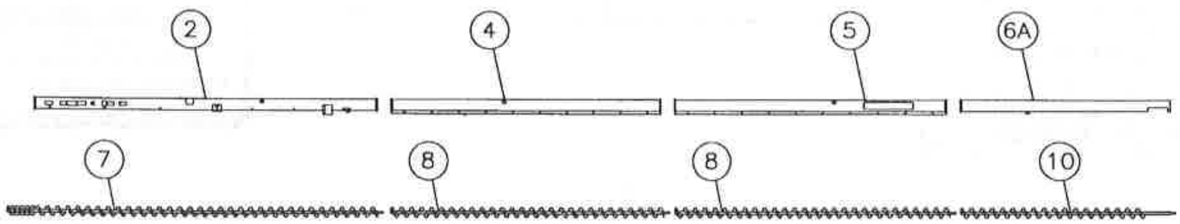
PARTS LIST

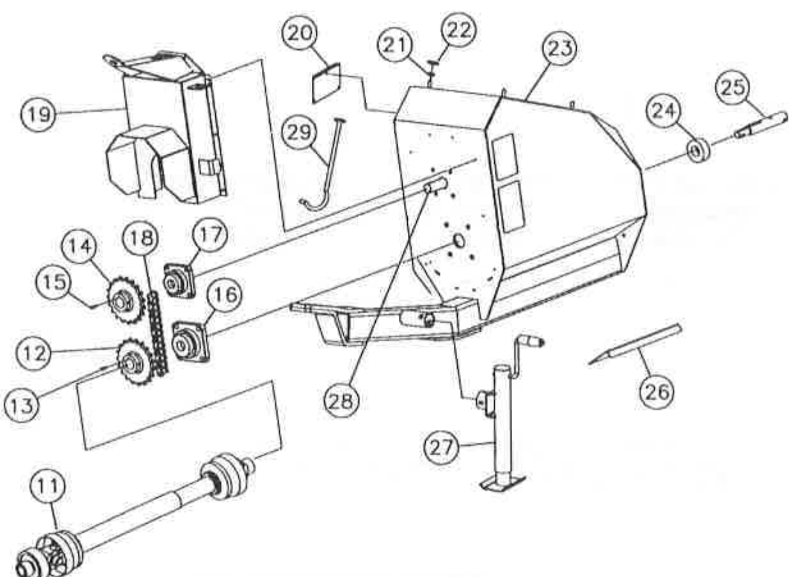
MAIN AUGER COMPONENTS

72'

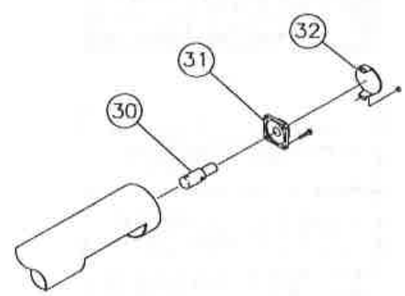


82'





INLET HOPPER DETAIL



HEAD BEARING DETAIL

PARTS LIST

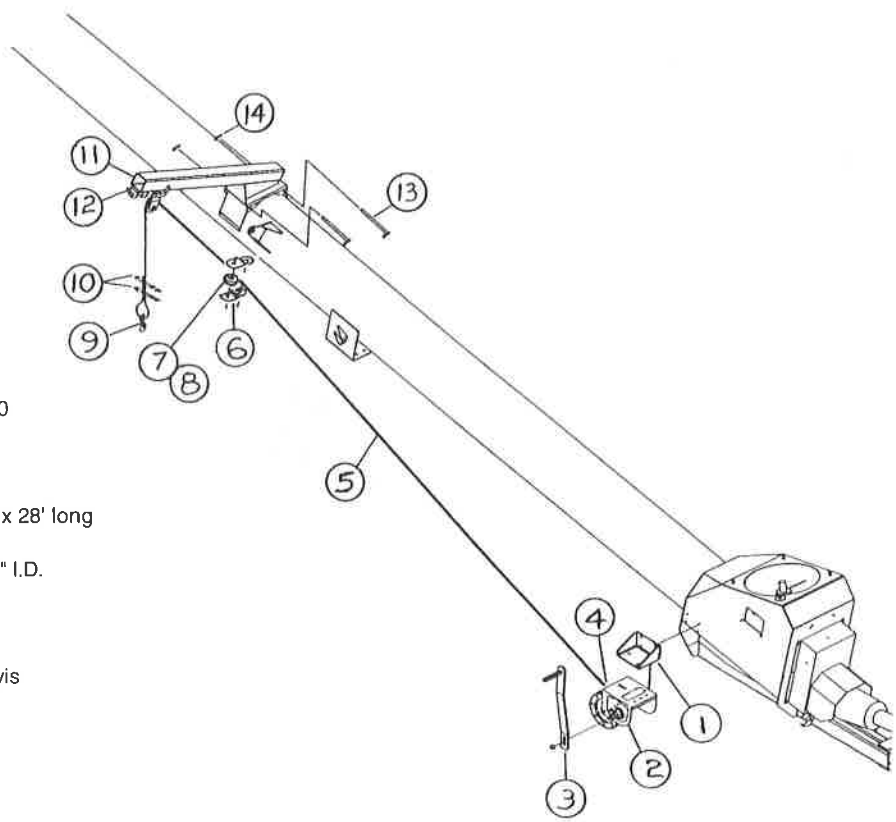
MAIN AUGER COMPONENTS

REF. NO.	PART NO.	DESCRIPTION
1	1021261-170	Lower Tube Section f/72' (25'-0" long)
2	1021264-170	Lower Tube Section f/82' (25'-0" long)
3	1021262-170	Mid Tube Section f/72' (20'-0" long)
4	1021265-170	Lower Mid Tube Section f/82' (20'-0" long)
5	- - -	Upper Mid Tube Section f/82' (20' long)
	1021266-270	Hutchinson Tube
	1021266-370	Mayrath Tube
6	- - -	Head Tube Section f/72' (25'-0" long)
	1021263-270	Hutchinson Tube
	1021263-370	Mayrath Tube
6A	1021267-170	Head Tube Section f/82' (15' long)
7	1021249	Lower Flight (26'-8" long) - 7 ga.
	1021255	Lower Flight (26'-8" long) - 1/4"
8	1021247	Mid Flight (20'-0" long) - 7 ga.
	1021253	Mid Flight (20'-0" long) - 1/4"
9	1021248	Head Flight (25'-0" long) - 7 ga.
	1021254	Head Flight (25'-0" long) - 1/4"
10	1021250	Head Flight (15'-0" long) - 7 ga.
	1021256	Head Flight (15'-0" long) - 1/4"

REF. NO.	PART NO.	DESCRIPTION
11	1015268	PTO Driveline (See Page P-17 for parts breakdown)
- -	4049A1	Key for Driveline (3/8" x 1 1/2" long)
12	1021047	Sprocket # 80 - 17 tooth , 2" bore
13	50307A1	Square Key (1/2" x 1-1/2" long)
14	40329	Sprocket # 80 -19 tooth, 1 1/4" bore
15	8371C	Square Key (1/4" x 1 1/2" long)
16	41058	Bearing - 2" bore (4-hole flange)
17	8370C	Bearing - 1 1/4" bore (4-hole flange)
18	1010391	Roll Chain # 80 - 35 Pitch
19	1021319	Chain & Driveline Shield
20	1005586	Access Door Plate
21	1005442	1" O.D. Spacer Washer
22	1005443	2" O.D. Retaining Washer
23	1021340	Inlet Hopper
24	1021259	Spacer Bushing (2 5/8" O.D. x 2" I.D. x 1 3/8" lg.)
25	1021260	Inlet Stub
26	1018671	Clean-out Door Plate
27	1011572	Jack Assembly
28	1018899	Gearbox (See Page P-15 for parts breakdown)
29	1021046	Hook for PTO Driveline
30	1010502	Head Stub (2" to 1 1/2" dia.)
31	1010A	Bearing - 1 1/2" Bore (4-hole flange)
32	1004300	Head Cover

SWING-OUT HOPPER LIFT COMPONENTS

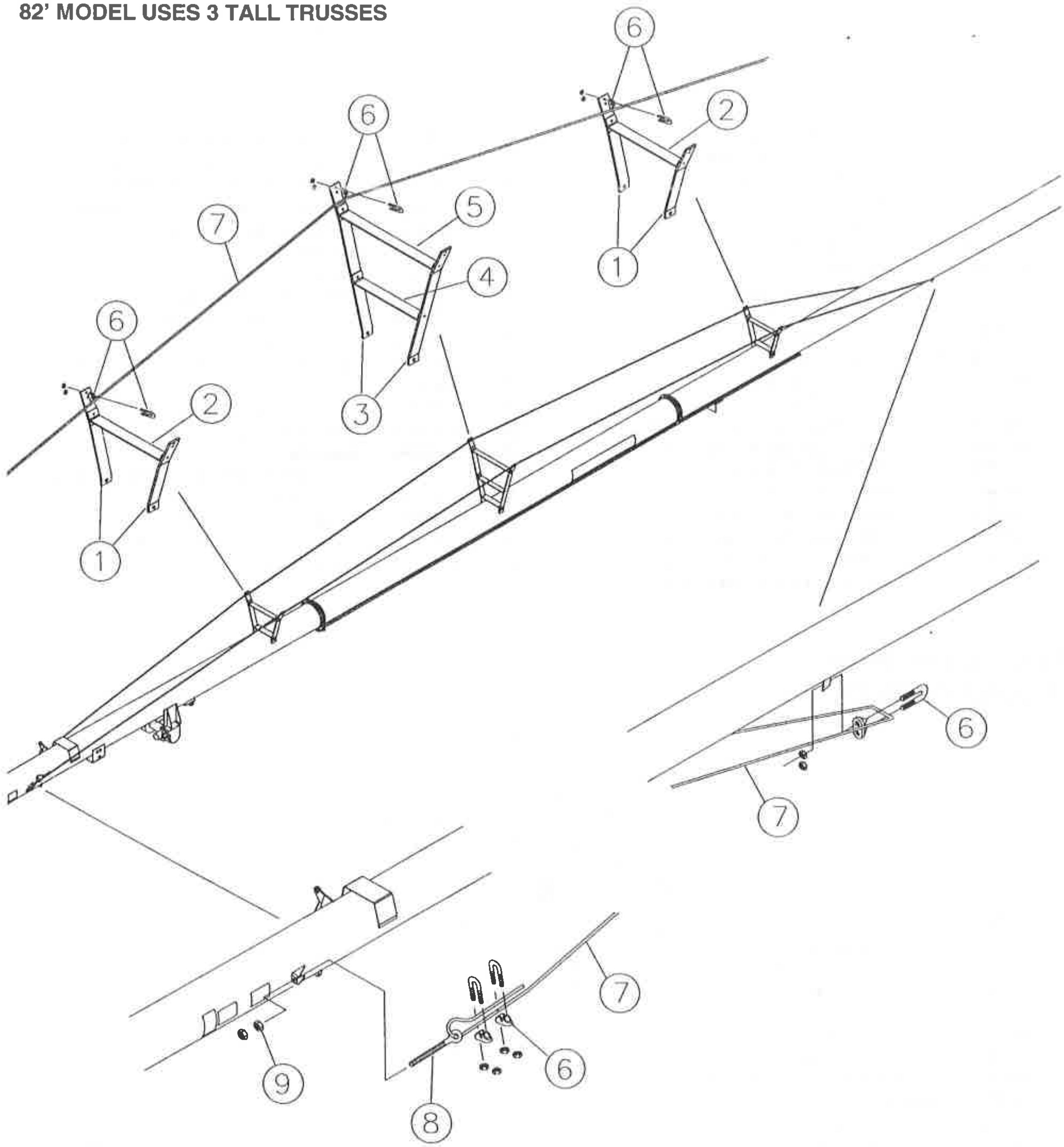
REF. NO.	PART NO.	DESCRIPTION
1	1021213	Winch Mounting Plate
2	3335A11	Complete Winch - K1550 (with handle)
3	41595	Winch Handle
4	41600	Winch Keeper Kit
5	1003819	Hopper Lift Cable - 1/4" x 28' long
6	1007890	Pulley Clevis Plate
7	1008195	Cable Pulley 3" O.D. x 1" I.D.
8	1008197	Pulley Bushing 1" O.D.
9	106411	Hopper Hook
10	6369C	1/4" Cable Clamp
11	1021093	Lift Arm with Pulley Clevis
12	1010582	Retaining Pin
13	1021121	Attachment Pin
14	635164	Hair Pin



PARTS LIST

TRUSS COMPONENTS

72' MODEL SHOWN
82' MODEL USES 3 TALL TRUSSES



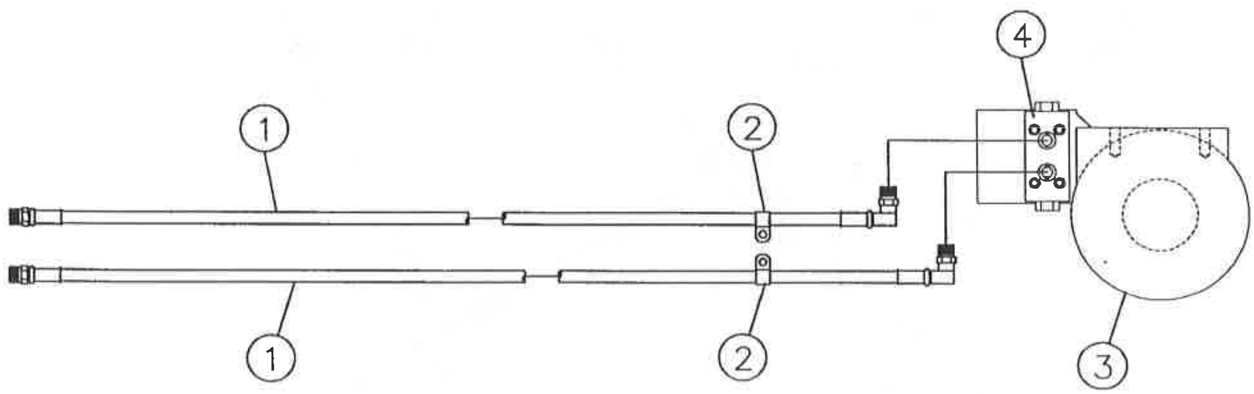
03271A1

A0004556

PARTS LIST

TRUSS COMPONENTS

REF. NO.	PART NO.	DESCRIPTION
1	1019159	Truss Side (19 3/4" long) f/ 72' Model only
2	1019158	Truss Crossbrace (20" long) f/72' Model only
3	1019160	Truss Side (32 1/4" long)
4	1019157	Truss Crossbrace (18 1/4" long)
5	1019156	Truss Crossbrace (26 3/8" long)
6	3010L11	3/8" Cable Clamp
7	1018787	3/8" Cable x 104' long (f/72' Model)
	1021068	3/8" Cable x 135' long (f/82' Model)
8	866015-1	5/8" Eyebolt
9	D1150	5/8" Non-Lock Nut

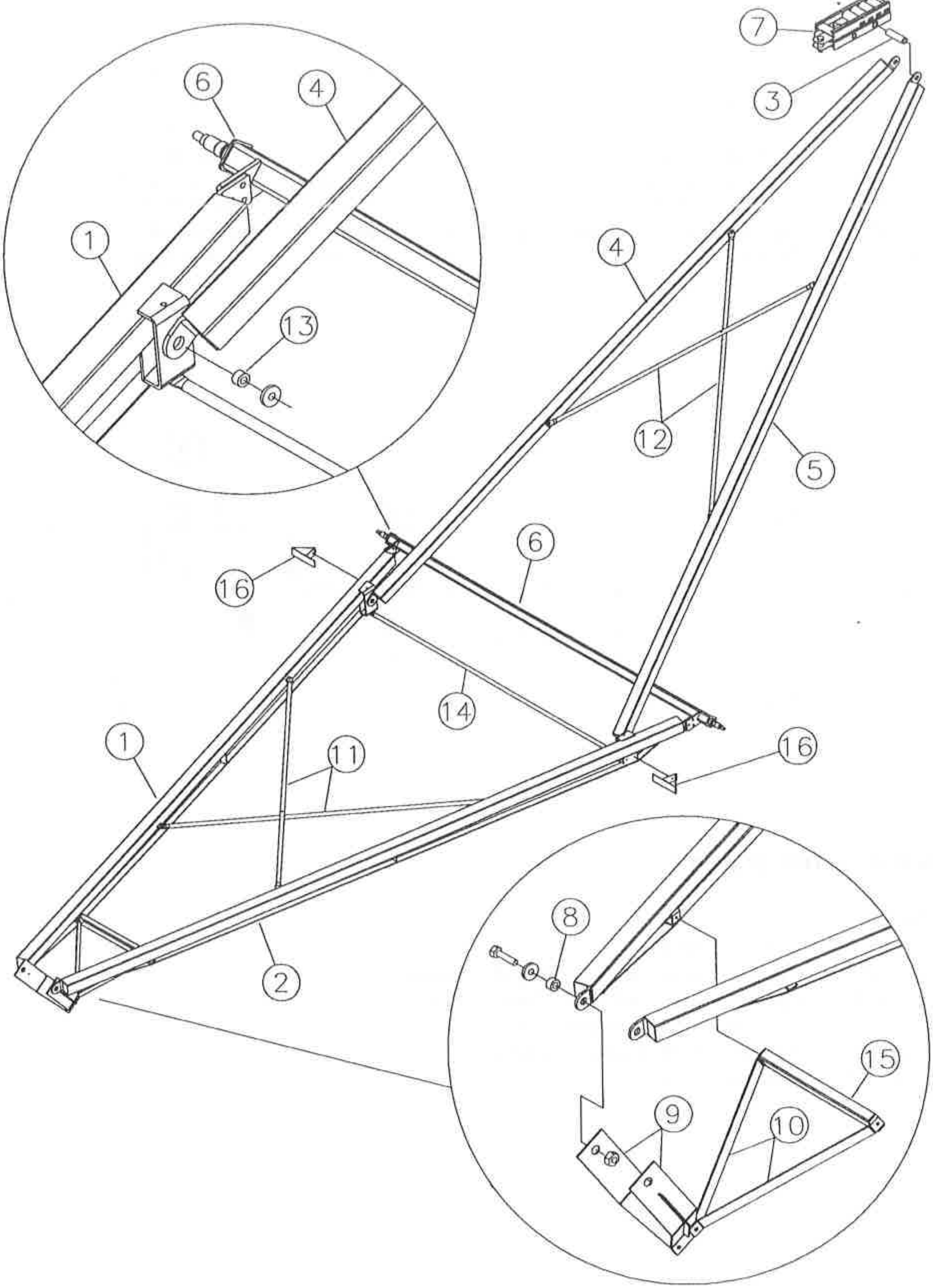


HYDRAULIC COMPONENTS

REF. NO.	PART NO.	DESCRIPTION
1	1021088	Hydraulic Hose - 3/8" x 28' long (72' Model)
	1021086	Hydraulic Hose - 3/8" x 35'-6" long (82' Model)
2	1006324	Hydraulic Hose Mounting Clamp
3	1021162	Hydraulic Winch (less relief valve)
4	1021163	Crossover Relief Valve

PARTS LIST

UNDERCARRIAGE



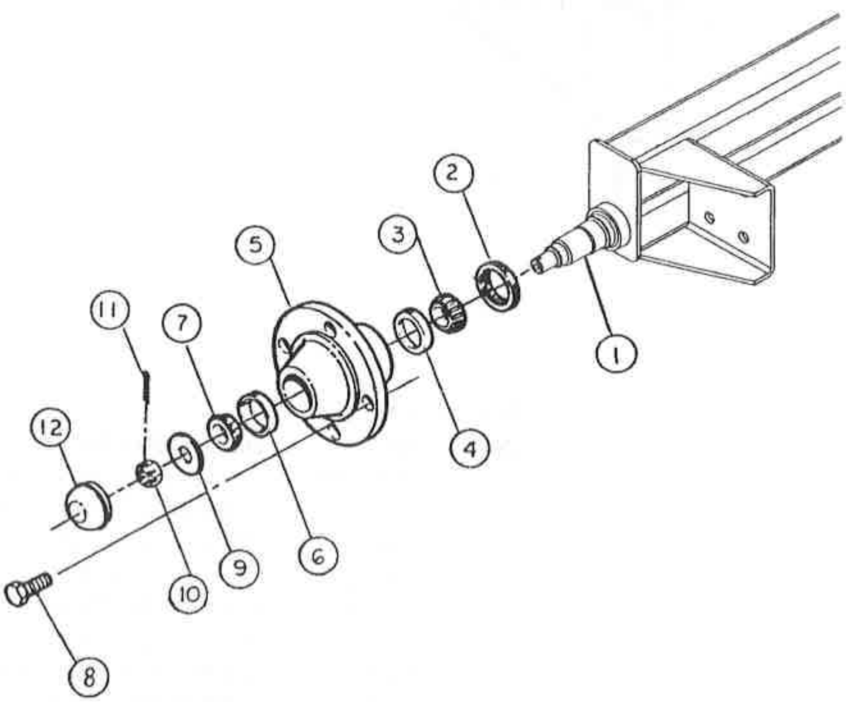
PARTS LIST

UNDERCARRIAGE

REF. NO.	PART NO.	DESCRIPTION
1	---	Lower Arm (left)
	1018362	72' Model (230 1/4" long)
	1019233	82' Model (269 1/2" long)
2	---	Lower Arm (right)
	1018361	72' Model (230 1/4" long)
	1019234	82' Model (269 1/2" long)
3	1020041	Trolley Bushing (7 5/8" long)
4	---	Upper Arm
	1018360	72' Model (236" long)
	1019244	82' Model (275 3/4" long)
5	---	Upper Arm
	1018360	72' Model (236" long)
	1019244	82' Model (275 3/4" long)
6	1019052	Axle (150 3/4" long)
7	1021062	Trolley Assembly (See Page P-11 for trolley parts)
8	1021198	Bushing (1 1/2" O.D. x 15/16" long)
9	1020033	Lower Pivot Bracket
10	---	Lower Pivot X-Brace
	1020036	72' Model (28" long)
	1019217	82' Model (32" long)
11	---	Lower Arm X-Brace Tube
	1020015	72' Model (103 3/4" long)
	1019249	82' Model (109 1/4" long)
12	---	Upper Arm X-Brace Tube
	1019134	72' Model (96 3/4" long)
	1019247	82' Model (103" long)
13	1021065	Bushing (1 1/2" O.D. x 11/16" long)
14	---	Connecting Tube
	1019132	72' Model (113 1/2" long)
	1019243	82' Model (114 1/2" long)
15	1020030	Lower Pivot Cross Support
16	1021204	Reflector Bracket

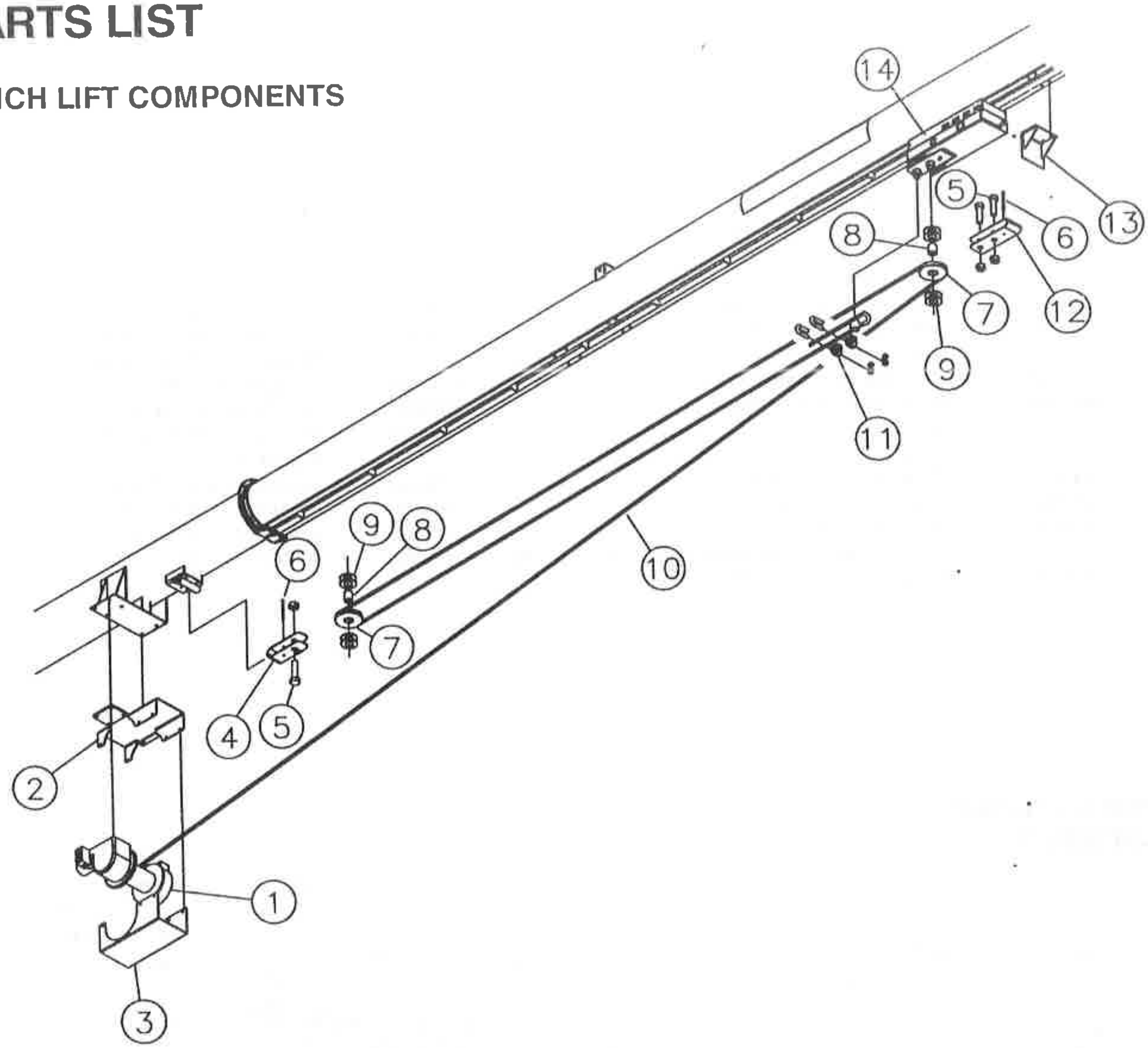
SPINDLE & HUB ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION
1	1019020	Spindle (weld-in)
2	3074R1	Grease Seal
3	3080R1	Inner Cone
	(LM501349)	(Timken No.)
4	3149R1	Inner Cup
	(LM501310)	(Timken No.)
5	3071R1	Hub (furnished with cups)
6	3148R1	Outer Cup
	(LM67010)	(Timken No.)
7	3079R1	Outer Cone
	(LM67048)	(Timken No.)
8	106241	Lug Bolt
9	D1148	Washer
10	D1147	Slotted Hex Nut
	107230	Cotter Pin (5/32" x 1 3/4")
12	40588	Hub Cap



PARTS LIST

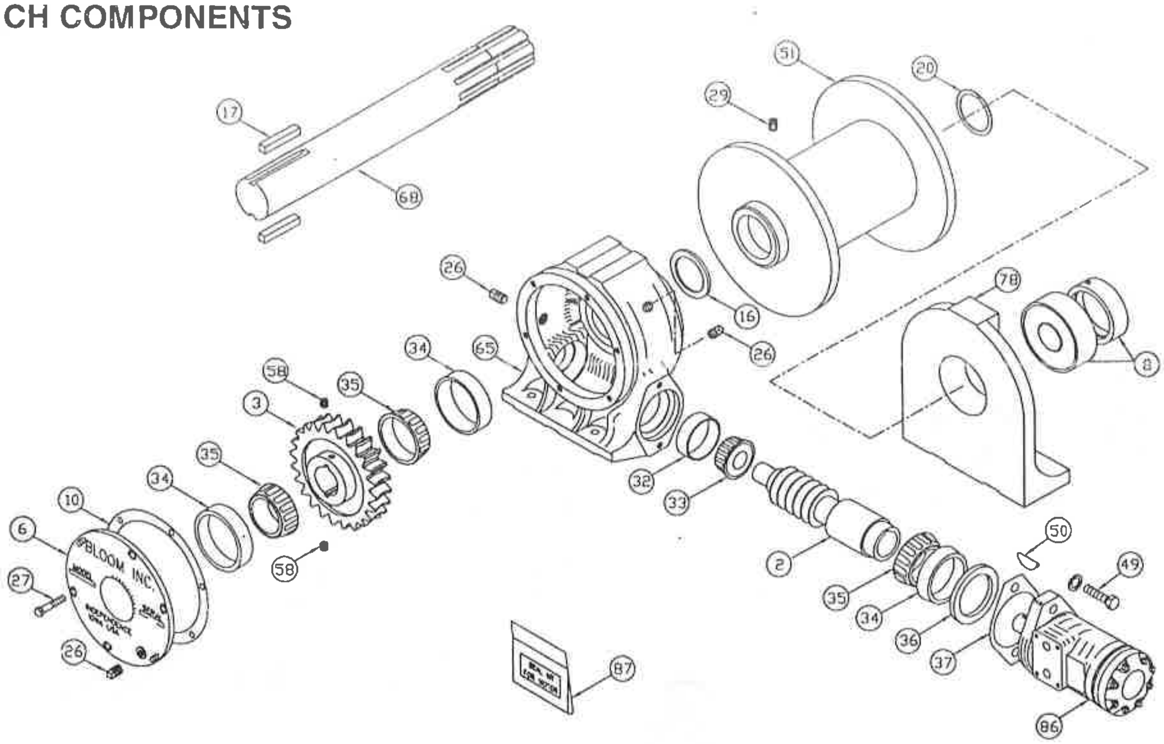
WINCH LIFT COMPONENTS



REF NO.	PART NO.	DESCRIPTION
1	1021069	Complete Winch Assembly (See Page P-12 for winch components)
2	1021242	Upper Guard Half
3	1021237	Lower Guard Half
4	1021155	Lower Cable Pulley Clevis
5	1021143	Bolt HHCS, 1" x 4" long, Grade 5
6	D1165	Cotter Pin, 1/4" x 3" long
7	1021160	Cable Pulley, 5" O.D.
8	1021146	Cable Pulley Bushing (1 5/8" O.D. x 1 23/32" long)
9	3047R1	1 1/2" Flatwasher
10	1021091	1/2" dia. Cable x 96' long (72' Model)
11	1021084	1/2" dia. Cable x 106' long (82' Model)
12	1021154	Trolley Cable Pulley Clevis
13	1019093	Trolley Stop
14	1021062	Complete Trolley Assembly

PARTS LIST

WINCH COMPONENTS



REF NO.	PART NO.	REQD.	DESCRIPTION
2	W-202-1-25	1	Worm Shaft 40:1 Ratio
3	10-203-1-25	1	Bronze Gear 40:1 Ratio
6	10-206	1	Gear Case Cover
8	12-208	1	End Bearing 1 1/2" I.D. x 3 1/8" O.D.
10	W-210K	1	Gear Case Cover Gasket Kit
16	10-216	1	Oil Seal
17	10-217	2	3/8" x 3/8" x 1 7/16" Key
20	10-220	1	1 1/2" External Retaining Ring
26	W-226	3	3/8" Pipe Plug
27	W-227	6	5/16" - 18NC x 1" HT Capscrew
29	W-229	1	1/2" x 1/2" Socket Setscrew
32	W-232	1	3/4" Bearing Cup 21212
33	W-233	1	3/4" Bearing Cone 21075
34	W-234	3	1 1/2" Bearing Cup LM29710
35	W-235	3	1 1/2" Bearing Cone LM29749
36	W-236	1	.270 - .275 Spacer
37	W-237K	1	Motor Gasket Kit
49	W-249	2	7/16" - 14NC x 1 1/2" HT Capscrews & Lockwashers
50	W-250	1	1/4" x 1" Woodruff Key (rounded top)
51	4853-1	1	Spec. Drum
58	W-258	2	3/8" x 1/2" Socket Setscrews
65	10-265	1	Gear Case
68	10-269	1	1 1/2" Shaft
78	10-278	1	End Housing
86	10-4845	1	BM Motor Char-Lynn 101-1042
87	W-3231	1	Char-Lynn H-Series 101-XXXX-009 (60540) Seal Kit

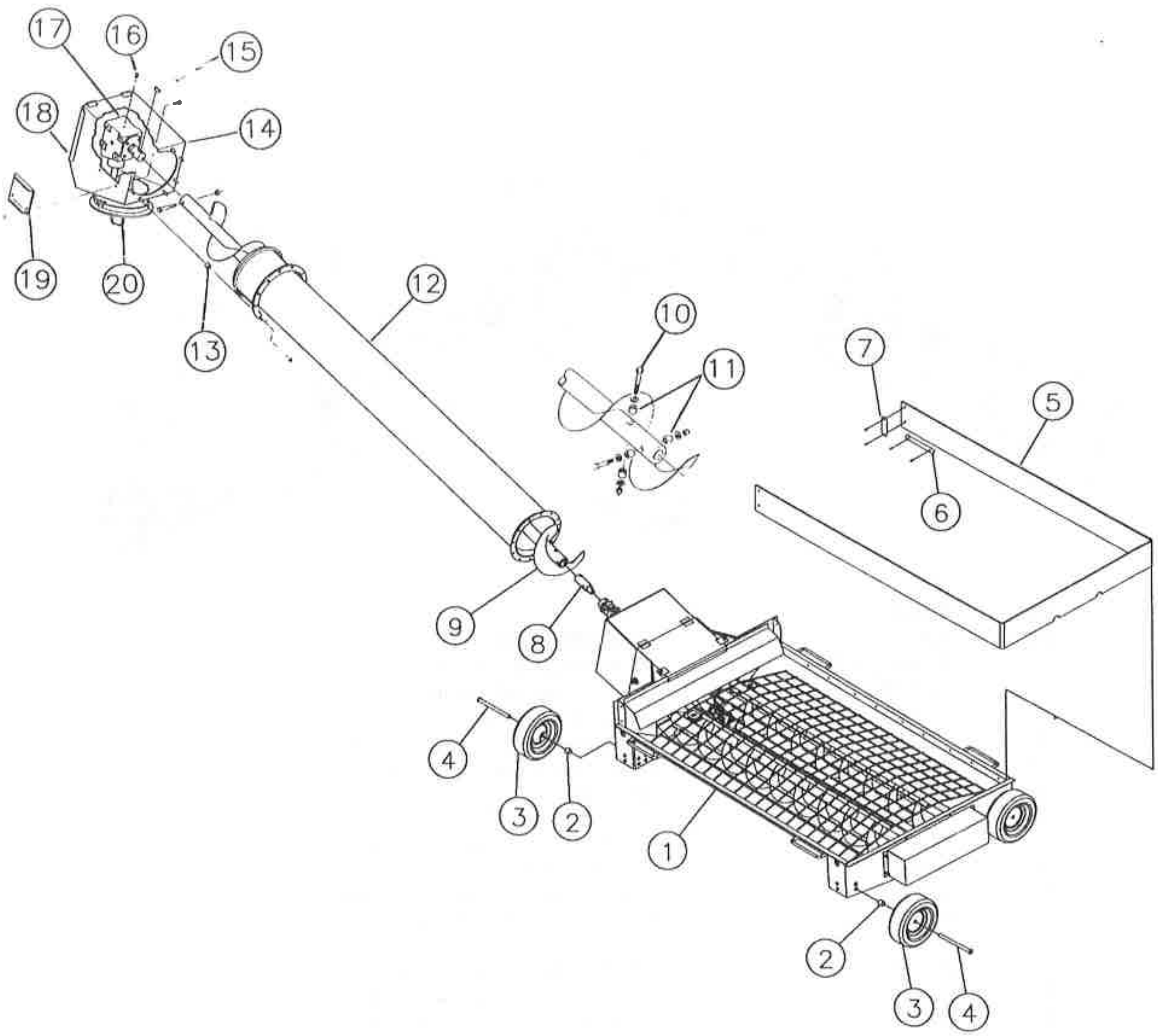
Parts may be ordered directly from Bloom Manufacturing, Inc.

WHEN ORDERING PARTS, SPECIFY SERIAL NUMBER AND MODEL STAMPED ON COVER

BLOOM MANUFACTURING, INC.
WINCH DIVISION
INDEPENDENCE, IA 50644 U.S.A.
PHONE 319-827-1139 FAX: 319-827-1140

PARTS LIST

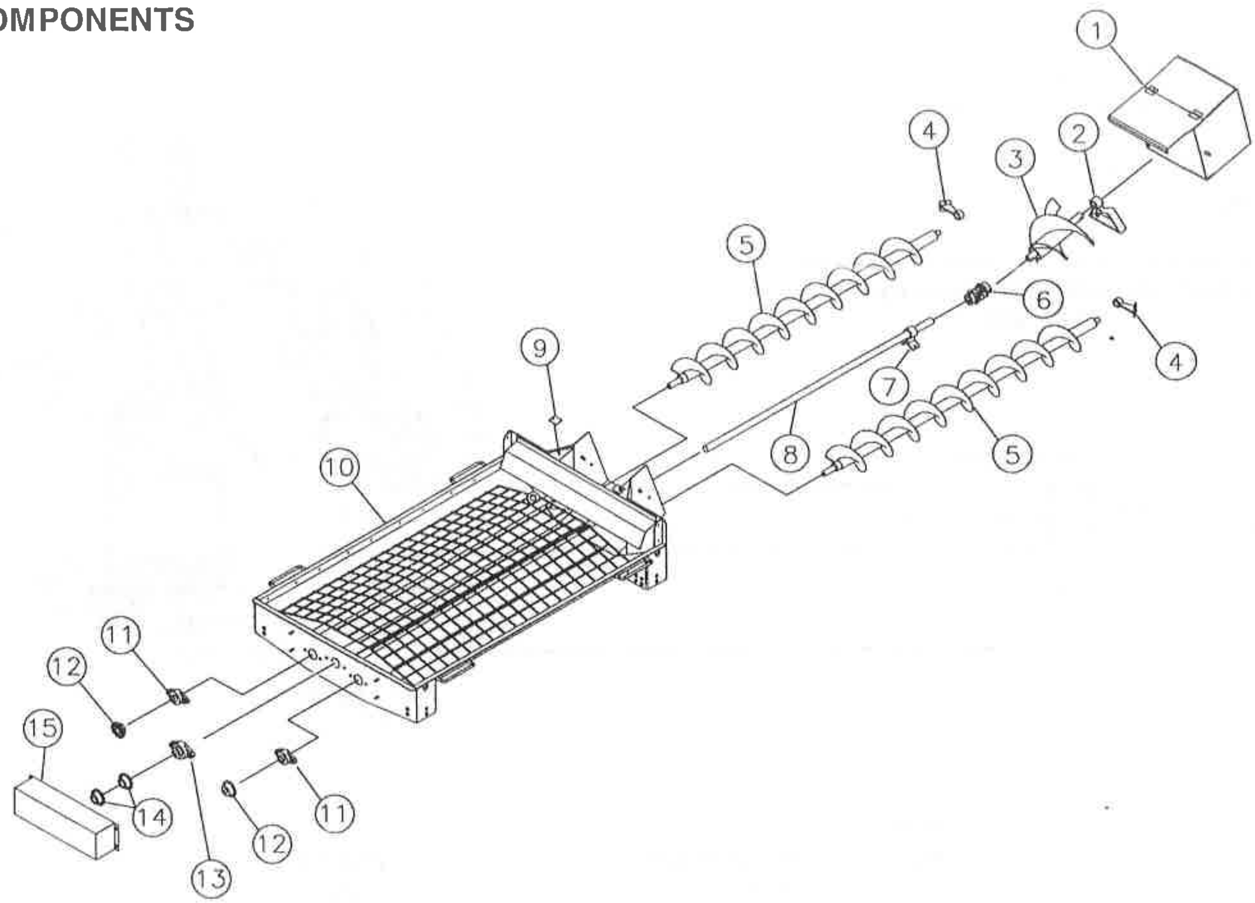
SWING-OUT HOPPER COMPONENTS



REF. NO.	PART NO.	DESCRIPTION
1	1021001	Hopper Weldment
2	1021030	Hopper Wheel Spacer (1" O.D. x 7/8" long)
3	1022373	Hopper Wheel (10" O.D. x 5/8" Bore)
4	1016573	5/8" O.D. Pin x 9 1/4" long
5	1021027	Hopper Belting
6	1013680	Belting Retaining Clip x 9 7/8" long
7	1021122	Belting End Strap x 4 1/2" long
8	1010388	Incline Flight Stub (2" O.D. to 1 1/4" x 6 1/2" long)
9	1021009	Incline Flight (7 ga.)
9	1021205	Incline Flight (1/4")
10	4913	Bolt, HHCS (1/2" dia. x 3 3/4" long)
11	1005890	Rubber Sleeve (7/8" O.D. x 5/8" long)
12	1021214	Incline Tube Weldment
13	1022801	Spacer Bushing (11/16" O.D. x 7/8" long)
14	1021215	Spout Weldment
15	003281	# 1210 Woodruff Key
16	1015290	1/8" NPT Vented Plug
17	1010380	Gearbox (See page P-16 for parts)
18	90040	Spring Clip for Pop Open Door
19	1005586	Side Access Door for Spout
20	1005356	U-Joint w/Splined End
--	837029	# 809 Woodruff Key for Ref. 20

PARTS LIST

SWING-OUT HOPPER COMPONENTS



REF. NO.	PART NO.	DESCRIPTION
1	1021006	Coupler Box
2	1021028	Bearing Stand for Intermediate Flight (with bronze bushing)
- -	8379C	1 1/4" Bronze Bushing only for Ref. 2
3	1021011	Intermediate Flight
4	1021017	Bearing Stand for Hopper Flight (w/bronze bushing)
- -	6303D	1" Bronze Bushing only for Ref. 4
5	1021010	Hopper Flight - 71" overall length
6	1013676	U-Joint
7	1021116	Power Shaft Bearing Stand (w/bronze bushing)
- -	8379C	1 1/4" Bronze Bushing only for Ref. 7
8	1021012	Power Shaft
9	1021020	Door Retaining Clip
10	1021001	Hopper
11	6818D	1" Bore Bearing (2-hole Flange)
12	6815D	15 tooth #50 Sprocket (1" bore)
- -	4020A1	1/4" Square Key x 1" long for Ref. 12
13	8325A	1 1/4" Bore Bearing (2-hole Flange)
14	8819D	15 tooth #50 Sprocket (1 1/4" bore)
- -	4020A1	1/4" Square Key x 1" long for Ref. 14
15	1021102	Chain Shield
- -	1021120	Chain #50 - 34 Pitch with Link

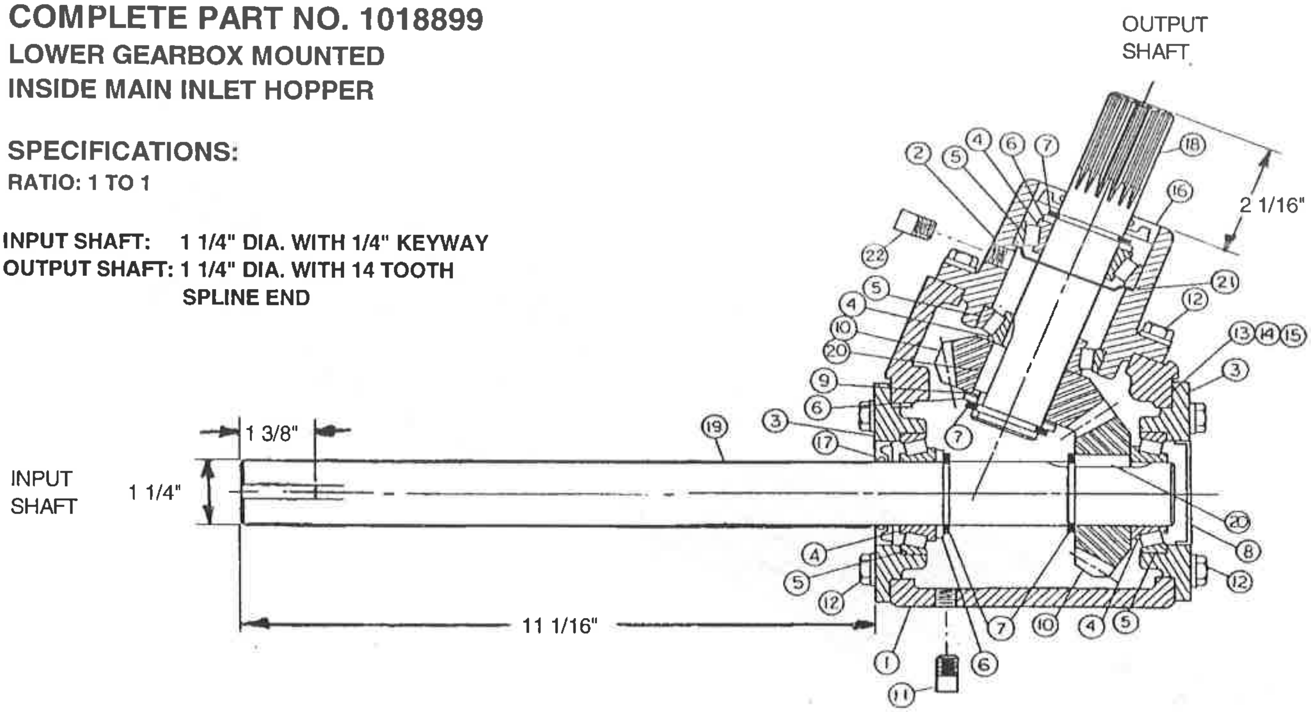
PARTS LIST

GEARBOX

COMPLETE PART NO. 1018899
LOWER GEARBOX MOUNTED
INSIDE MAIN INLET HOPPER

SPECIFICATIONS:
RATIO: 1 TO 1

INPUT SHAFT: 1 1/4" DIA. WITH 1/4" KEYWAY
OUTPUT SHAFT: 1 1/4" DIA. WITH 14 TOOTH SPLINE END



REF. NO.	DESCRIPTION	PART NO.
1	Case	1005451
2	Cap	1005452
3	Cover	1005453
4	Brg. Cone	1005454
5	Brg. Cup	3148R1
6	Washer	1005456
7	Snap Ring	1005457
8	Cap	1005458
9	Shim .007 x 1.25 I.D.	1005459
10	Gear 68° Cut	1005460
11	1/8" NPT Solid Plug	035913
12	5/16" x 7/8" NC Capscrew w/SEM	003093
13	Shim .003	40382
14	Shim .005	40381
15	Shim .014	40380
16	Seal	1005464
17	Seal	1005465
18	Shaft Output w/14 Tooth Spline	1005468
19	Shaft Input 1 1/4" Dia.	1018898
20	Key	1005466
21	Washer - Grease	1005472
*22	1/8" NPT Vented Plug	1015290
Not Shown	1/4" Plug (NPT Pipe)	- -

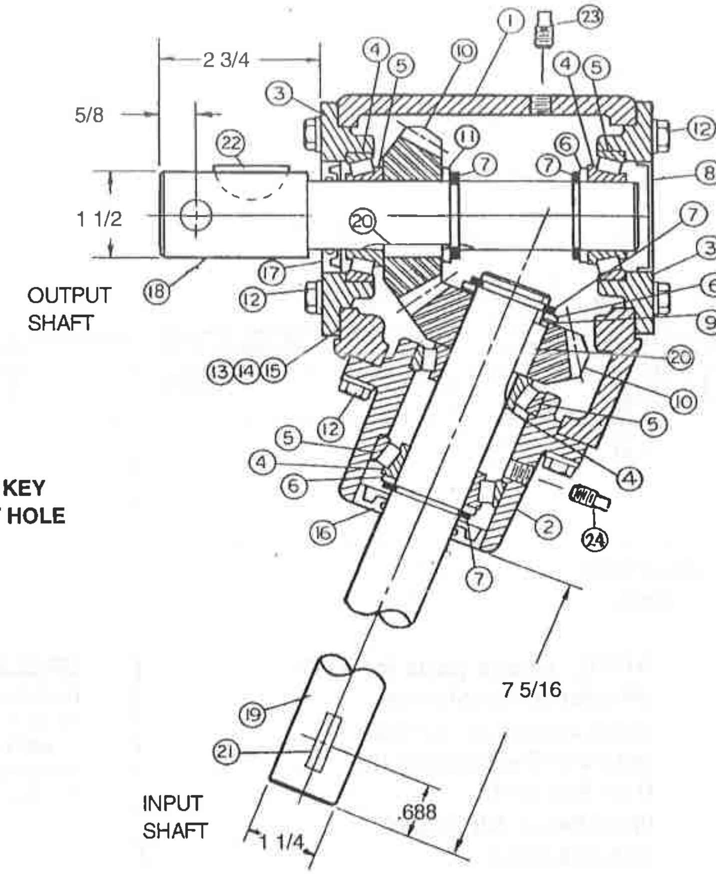
*NOTE: Not part of the complete assembly. Order separately.

PARTS LIST

GEARBOX

COMPLETE PART NO. 1010380

UPPER GEARBOX MOUNTED IN THE INCLINE TUBE SPOUT



SPECIFICATIONS:

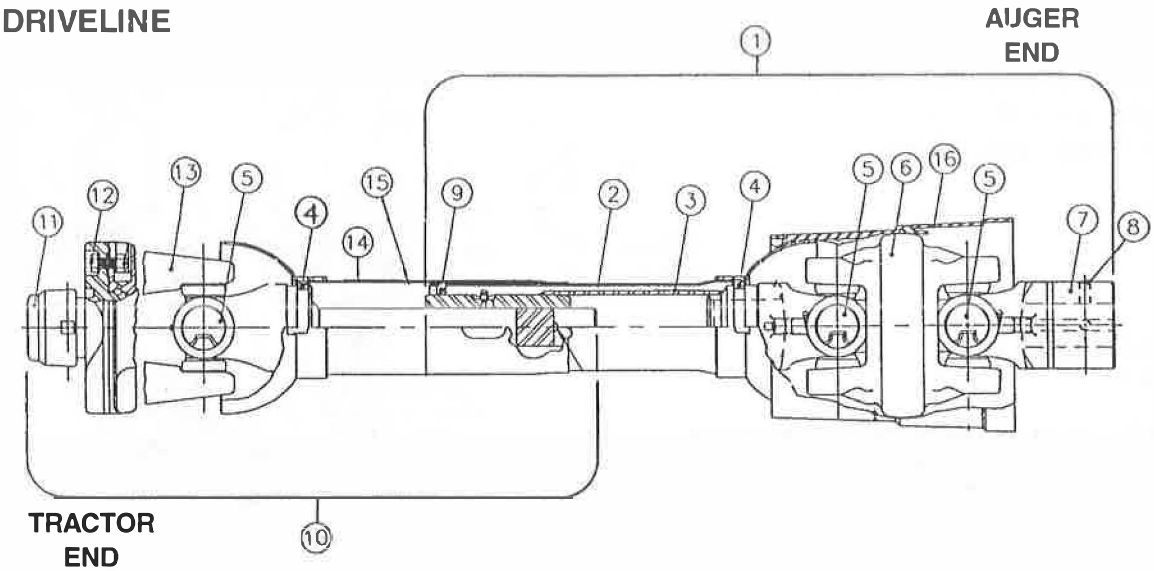
RATIO: 1 TO 1

INPUT SHAFT - 1 1/4" DIA. WITH 1/4" WOODRUFF KEY
OUTPUT SHAFT - 1 1/2" DIA. WITH 17/32" DIA. BOLT HOLE AND 3/8" WOODRUFF KEY

REF. NO.	DESCRIPTION	PART NO.
1	Case	1005451
2	Cap	1005452
3	Cover	1005453
4	Bearing Cone # LM67048	1005454
5	Bearing Cup # LM67010	3148R1
6	Washer	1005456
7	Snap Ring	1005457
8	Cap	1005458
9	Shim .007 x 1.25 I.D.	1005459
10	Gear 68° Cut	1005460
11	Bushing, 18 ga. - NRM	035597
12	5/16" x 7/8" NC Capscrew w/SEM	003093
13	Shim .003	40382
14	Shim .005	40381
15	Shim .014	40380
16	Seal	1005464
17	Seal	1005465
18	Shaft Output	1010381
19	Shaft Input	1010382
20	Key 1/4"	1005466
21	Woodruff Key # 809	837029
22	Woodruff Key # 1210	003281
23	1/8" NPT Vented Plug	1015290
24	1/8" NPT Solid Plug	035913
Not Shown	1/4" Plug (NPT Pipe)	---

PARTS LIST

PTO DRIVELINE



NOTE: Repair parts for PTO drivelines can also be purchased directly from:
Weasler Engineering,Inc.
P.O. Box 558
West Bend, WI 53095
414-338-2161

SPECIFICATIONS:
U-JOINT TYPE - 55R
AUGER END 1 1/2" BORE WITH 3/8" KEYSEAT
TRACTOR END 1 3/8 - 6B SPLINE
CATEGORY 6 - 50° CV

REF. NO	DESCRIPTION	HUTCHINSON/ MAYRATH PART NO.	WEASLER PART NO.
- -	PTO Driveline, Complete	1015268	M-19358
1	Joint & Tube Half Assembly with Guard (Auger End)	1015319	92-19358
2	Inner Guard (Includes Ref. No. 4)	1015320	96-19358
3	Inner Safety Sign	13-10022	13-10022
4	Shield Bearing Retainer	1015321	19-11106
5	U-Joint Cross Repair Kit	1015322	03-10050
6	50° CV Center Housing	1015323	55251-1599
7	End Yoke	1015324	M-19358C
8	.375 - 16 x .38 long Setscrew	33170	N/A
9	Centralizer	1015325	04-14538
10	Joint & Shaft Half Assembly with Guard (Tractor End)	1015326	93-19358
11	Safety Slide Lock Repair Kit	1015327	26-15120
12	Shear Bolt and Nut Kit	1015328	(See Note)
13	Ball Shear Assembly	1015329	M-19358A
14	Outer Safety Sign	13-10021	13-10021
15	Outer Guard (Includes Ref. No. 4)	1015330	97-19358
16	C.V. Bell Extension	1015331	36-15133

NOTE: Shear Bolt Kit includes (6) 3/8" - 16 x 1" long Grade 8 hex head bolts and locknuts.

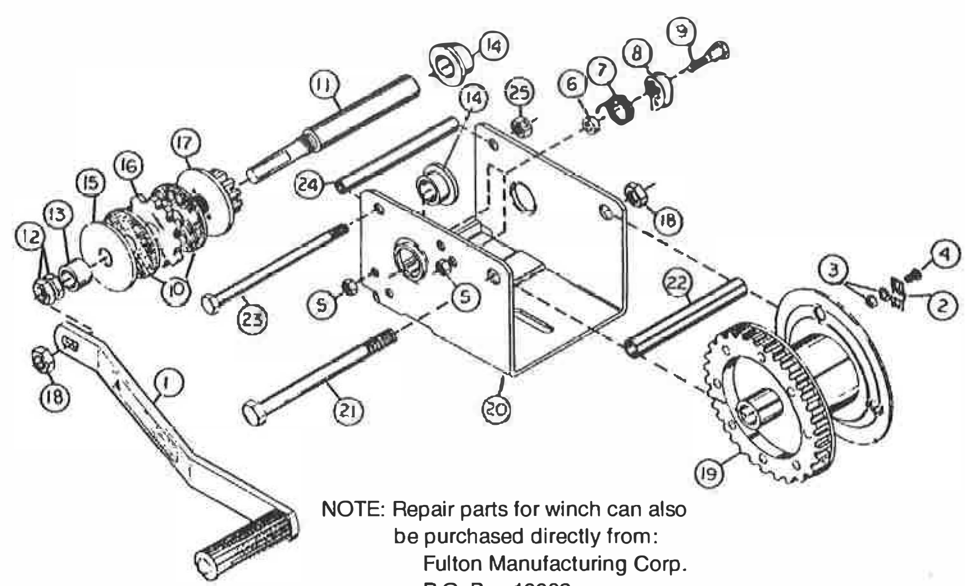
PARTS LIST

WINCH - BRAKE TYPE

FULTON MODEL K1550 WINCH
COMPLETE PART NO. 3335A11

REF NO.	DESCRIPTION	HUTCHINSON/ MAYRATH PART NO.	FULTON PART NO.
1	Handle Assembly	41595	2461S01
2	Cable Clamp		
3	Lock Washer & Nut	Cable Keeper	Cable Keeper
4	Carriage Bolt	Kit 41600	Kit 5621S01
5	Lock Nut 5/16" - 18 Hex		
6	Ratchet Spacer	Ratchet Kit	Ratchet Kit
7	Ratchet Spring	40836	6730S00
8	Ratchet Pawl		
9	Hex Head Shoulder Bolt 5/16" - 18		
10	Brake Disc Kit	41596	1558S00
11	Input Shaft		
12	Lock Nut 1/2" - 13 Hex		
13	Spacer	Input Shaft	Input Shaft
14	Bushing	Kit	Kit
15	Shaft Brake Disc	41597	1563S01
16	Ratchet Gear		
17	Pinion & Disc Assembly		
18	Hex Lock Nut 1/2" -13	*	*
19	Drum Assembly	**	**
20	Frame	**	**
21	Hex Head Capscrew 1/2" - 13 - 5 3/4"	*	*
22	Drum Spacer	**	**
23	Hex Head Capscrew 3/8" - 16 - 5 3/4"	*	*
24	Frame Spacer	**	**
25	Hex Lock Nut 3/8" - 18	*	*
26	Handle Label	2169A1	**

***Indicates standard hardware items - purchase locally.**
****These items are not available as separate parts because of the precision assembly required. If these parts require replacement, a new winch unit is recommended.**



NOTE: Repair parts for winch can also be purchased directly from:
Fulton Manufacturing Corp.
P.O. Box 19903
Milwaukee, WI 53219
715-693-1700

WARRANTY

AG GROWTH INTERNATIONAL INC. – FORM OF LIMITED WARRANTY

Ag Growth International Inc. (“AGI”) warrants that the goods and/or services being supplied (the “Goods”) will be free from defects in materials and workmanship under normal conditions, use, service, and maintenance, for a period of twelve (12) months from the date of first operation of the Goods, but in no event more than eighteen (18) months from the date of delivery of the Goods to the end-user (the “Warranty Term”). If the Goods are being used for rental purposes, the Warranty Term for the subject Goods shall be limited to 90 days.

Subject to AGI’s sole discretion, if the Goods, or a component thereof, are found to have a default in materials and/or workmanship within the Warranty Term, AGI will, at its own option and expense, repair or replace the subject Goods or refund the purchase price for the applicable Goods. Any warranty related expenses incurred on behalf of or by the end-user without the prior written consent of AGI shall be the sole responsibility of the end-user. Expenses relating to travel, customs or import duties and tariffs, equipment rental, and any costs associated with accessing the Goods are the sole responsibility of the customer. Warranty shall be void in the event the Goods are returned or disposed of without the written consent of AGI.

The customer shall not assert a claim that the Goods are defective unless the customer gives written notice to AGI of such defect within forty-eight (48) hours of discovering such defect. In the event of a warranty claim, the customer must complete any and all information required by AGI in order to properly assess or investigate the claim. AGI shall be given a reasonable opportunity to inspect and test the Goods in question. Failure by the customer to notify AGI of such claim within 48 hours shall operate as a waiver of any and all such claims by the customer.

THIS IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY AGI WITH RESPECT TO THE GOODS AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION, MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE WHETHER OR NOT THE PURPOSE OR USE HAS BEEN DISCLOSED TO SELLER IN SPECIFICATIONS, DRAWINGS, OR OTHERWISE, AND WHETHER OR NOT AGI’S GOODS ARE SPECIFICALLY DESIGNED AND/OR MANUFACTURED BY AGI FOR BUYER’S USE OR PURPOSE.

This limited warranty extends solely to Goods manufactured by AGI and does not cover any third-party parts, components, or materials. To the extent permitted by the manufacturer, AGI will pass on applicable warranties on third-party parts, components or materials to the end-user. This warranty does not extend to any losses or damages due to misuse, use of a kind and/or to a degree not reasonably expected to be made of the Goods, any use of the Goods which is not an intended use as specified in AGI’s published product literature or otherwise specified by AGI in writing, accident, acts of God, abuse, neglect, normal wear and tear (including corrosion and cosmetic issues), any equipment attached to or used in conjunction with the Goods, any field modifications or substitutions to original Goods, component damage incurred during shipping and handling, unauthorized modification or alteration, used beyond rated capacity, or improper installation, maintenance or application.

THE SOLE AND EXCLUSIVE REMEDY FOR ANY CLAIM HEREUNDER SHALL BE LIMITED TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE. AGI SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE AND IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED IN CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE), SHALL AGI’S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXCEED THE PURCHASE PRICE OF THE GOODS. BUYER AGREED THAT IN NO EVENT SHALL AGI’S

LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES. THE TERM "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, BUT NOT BE LIMITED TO, LOSS OF ANTICIPATED PROFITS, LOSS OF USE, LOSS OF REVENUE, FAILURE TO MEET GOVERNMENT AND/OR ADMINISTRATIVE REQUIREMENTS, CLEAN UP COSTS, COST OF CAPITAL AND DAMAGE OR LOSS TO OTHER GOODS, PROPERTY OR EQUIPMENT.

To the fullest extent permitted by law, Buyer, on behalf of itself, its suppliers, their agents, employees or any entity or person for which Buyer is or may be responsible ("Indemnitors") shall fully indemnify, save and hold AGI, its agents, employees, officers, directors, partners and related entities harmless from and against all liability, damage, loss, claims, demands, actions and expenses of any nature whatsoever, including, but not limited to reasonable attorney's fees which arise out of or are connected with: (a) any negligent act, error or omission by any Indemnitor in the performance of this agreement; (b) the failure of the Indemnitor to comply with the laws, statutes, ordinances or regulations of any governmental or quasi-governmental authority; or (c) the material breach of any term or condition of this agreement by any of the Indemnitors. Without limiting the generality of the foregoing, the indemnity hereinabove set forth shall include all liability, damage, loss, claims, demands, and actions on account of personal injury, death or property loss to any third party, any Indemnitee, any of Indemnitee's employees, agents, licensees or invitees. The indemnity set forth herein shall survive any termination of this agreement.

THIS WARRANTY IS NON-TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL END-USER AND SHALL BE CONSIDERED VOID IF NOT REGISTERED WITHIN 30 DAYS OF RECEIPT OF THE GOODS BY THE ORIGINAL END USER.

AGI HUTCHINSON MAYRATH

MANUFACTURED BY
HUTCHINSON I MAYRATH

514 W. Crawford Street
Clay Center, Kansas
USA 67432

TF 800.523.6993
P 785.632.2161
F 785.632.5964

hutchinson–mayrath.com

aggrowth.com | AGI